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Abyssei Boundary Current Studies Current Measurements North of the Falkland Plateau January 1986 - April 1987

by

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Data Report 147

nel Science Foun OCE-8416539

SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM			
Data Report 89-6-147	3. RECIPIENT'S CATALOG NUMBER			
T'ABYSSAL BOUNDARY CURRENT STUDIES CURRENT MEASUREMENTS NORTH OF THE FALKLAND PLATEAU JANUARY 1986-APRIL 1987	5. TYPE OF REPORT & PERIOD COVERED			
SANDART 1900-AFRILE 1901	6. PERFORMING ORG. REPORT NUMBER			
R. Dale Pillsbury, D. BARSTOW , J.M. BOTTERO, G. PITTOCK, D. C. ROOT, J. SIMPKINS, III, R. E. STILL, T. WHITWORTH, III	NSF OCE-8416539			
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS			
College of Oceanography Oregon State University Corvallis, Oregon 97331	NR083-102			
Office of Naval Research	September 1989			
Ocean Science & Technology Division Arlington, Virginia 22217	13. NUMBER OF PAGES 422			
14. MONITORING AGENCY NAME & ADDRESS(II dillerent from Controlling Office)	Unclassified			
	15. DECLASSIFICATION DOWNGRADING SCHEDULE			
Approved for public release; distribution unli				
18. SUPPLEMENTARY NOTES	•			
19. KEY WORDS (Continue on reverse elde if necessary and identify by block number				
20. ABSTRACT (Continue on reverse side it necessary and identify by block number) No abstract included	,			
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SECURITY CLASSIFICATION OF THIS PAGE (When Date	Entered	
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Abyssal Boundary Current Studies

CURRENT MEASUREMENTS NORTH OF THE FALKLAND PLATEAU

January 1986 - April 1987

by

R. Dale Pillsbury, D. Barstow, J. M. Bottero, G. Pittock, D. C. Root, J. Simpkins III, R. E. Still, and T. Whitworth III

National Science Foundation

OCE-8416539

Data Report 147 Reference 89-6 September, 1989

College of Oceanography Oregon State University Corvallis, Oregon 97331

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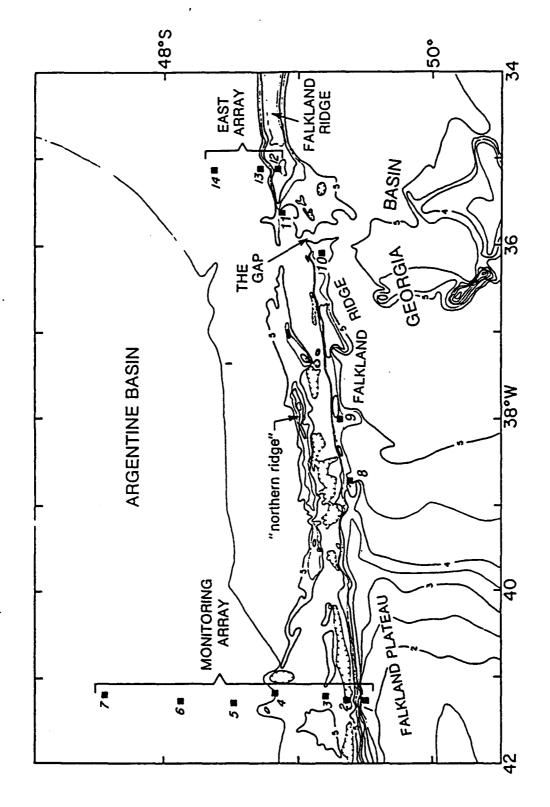


Figure 1. Geographical location of Abyssal Boundary Current Studies Moorings. January 1987 - April 1988.

INTRODUCTION

The data described in this report were collected in support of the program, Abyssal Boundary Current Studies, funded by the National Science Foundation. This program was designed to improve our understanding of the structure and variability of the deep western boundary currents and to estimate their transport of heat and mass. Some of these deep western boundary currents are formed by the northward flow of the Antarctic Bottom Water along the eastern margins of the southern continents and ridges. In particular these data are from the energetic flow of this Bottom Water entering the South Atlantic.

The Weddell Sea is an important formation region for the Bottom Water, some of which flows north through the Georgia Basin and into the South Atlantic. Other portions of the newly formed bottom water may flow to the east of the ridge system containing the Falkland Plateau, Ewing Bank, Falkland Ridge and the Islas Orcadas Rise. At the north-eastern corner of the ridge system the flow (if present) turns west along the ridge system and becomes part of the clock-wise deep circulation in the Argentine Basin.

The moored array shown in Figure 1 was designed to measure this flow to the west. The monitoring array was to the west of the Falkland Channels (shown as the "Gap") and measured flow from the Weddell Sea passing either through the "Gap" or around the eastern end of the ridge system. The East Array should measured the flow around the eastern end of the ridge system. Other moorings were placed to measure flow directly in the "Gap". Latitudes;, longitudes and bottom depths of the moorings are shown in Table 1.

The arrays were deployed in early 1986 and recovered in 1987. The design, installation and recovery of the array, like other parts of the program, was a joint effort by scientists and technicians from Oregon State University, Texas A&M University and the Argentine Antarctic Institute. The moored array consisted of 61 Aanderaa current meters suspended from more than 30,000 meters of dacron line supported by 416 44-centimeter glass balls. Recoveries were frequently hampered by severe weather. The R/V Conrad spent a total of 6 days hove-to in seas of up to 12 meters and winds that gusted to 60 knots. Mooring retrieval was also complicated by the malfunction of three acoustic releases. Moorings 2, 3, and 5 were recovered by severing the mooring line with 8000 meters of trawl wire towed behind the Conrad. Once mooring tension was thus relieved, the releases operated, and all instrumentation was recovered.

Mooring	Latitude	Longitude	Bottom Depth (Meters)
1	49*29.60'S	41°16.20'W	2509
2	49 ° 21.03'\$	41°18.30′W	5574
3	49°11.00'S	41°12.99'W	4999
4	48°50.00'S	41°10.25°W	5408
5	48°31.00'S	41*18.61W	6014
6	48°07.00'S	41°17.00'W	5889
7	47°28.90'S	41°13.60'W	5964
8	49°23.14'S	38*42.53*W	4493
9	49°18.63'S	38°00.57'W	4443
10	49'09.81'S	36°06.73′W	4888
11	48*52.44'S	35°40.67'W	5173
12	48*50.85'S	35°09.30'W	3543
13	48*43.07'S	35°09.60'W	5367
14	48°21.70'S	35°08.19'W	5258

Table 1. Latitudes, logitudes and bottom depths of ABC's Moorings.

SAMPLING AND PROCESSING INFORMATION

All moorings consisted of Aanderaa RCM 4 or RCM 5 current meters equipped to record speed, direction, and temperature, with some meters equipped to record conductivity, and/or pressure. The speed record from Aanderaa meters is based on the rotor count during the sampling interval. The nominal threshold of the Aanderaa speed sensor is 1.75 cm/sec. In processing, a zero in the speed sensor is set equal to 0.8 cm/sec, i.e., half the threshold. Direction, temperature, pressure, and conductivity are instantaneous measurements at the end of the sampling interval.

Data from the current meter tapes are transformed into binary numbers in the range [0, 1023] and each data record is assigned a time in Universal Coordinated Time (UCT). This product is known as the dated raw file. The sensors are routinely calibrated before and after deployment. The dated raw file, together with the calibration information, is then processed into metric units. Smith et al. (1986) reviewed the calibration procedure used with Aanderaa current meters. To form the LLP (6-hourly) records, the hourly records were filtered with a 60 + 1 + 60 point Cosine-Lanczos filter with half-amplitude at 40 hours and half-power at 46.6 hours. The data are

then resampled at 6-hour intervals.

Depths were obtained by one of two methods. Meters equipped with pressure sensors were assigned depths corresponding to the minimum pressure recorded. The minimum pressure was determined from unfiltered data. Conversion from pressure units to depth units, i. e. from decibars to meters, was done with a relationship developed by Professor J. L. Reid of Scripps Institution of Oceanography:

$$Z(m) = (0.992446)P - (2.28717x10^{-6})P^2 + (2.08213x10^{-11})P^3$$

This equation is based on a world average density profile. The depths of meters that did not have pressure sensors were estimated from those that did using the mooring line lengths as determined by a computer model that calculates line tension and the amount of stretch. Again, minimum rather than average or maximum depths were estimated. Bottom depth was calculated from the line lengths between the deepest instrument and the anchor.

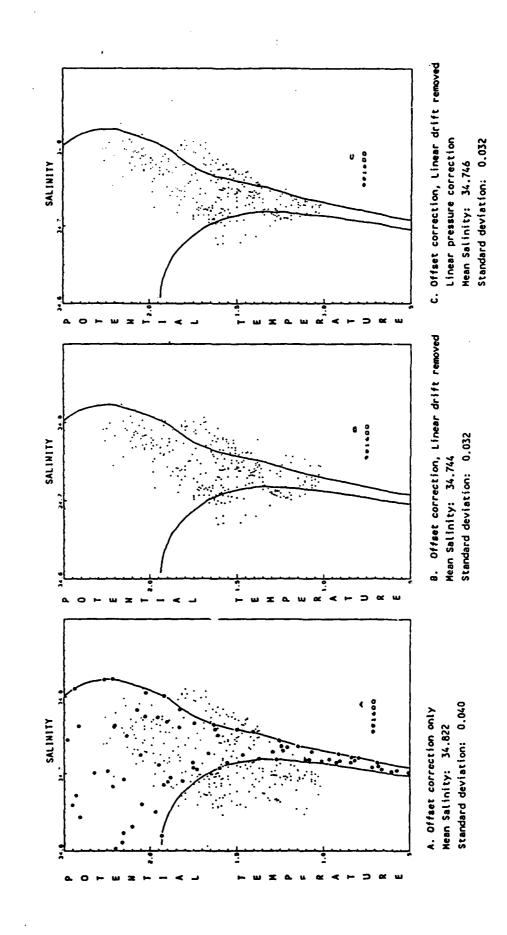
Occasional problems appear in the data as repeated numbers, isolated spikes, absence of data, or short runs of unexplainably erratic data. Problem areas of only a few cycles were corrected by linear interpolation; those longer than a few hours were bridged. The bridging technique employs Anderson's (1974) algorithm for a predictive filter which utilizes the spectral characteristics on both sides of the gap (Smylie et al. 1973; Ulrych et al. 1973). All questionable data have been eliminated unless a note to the contrary is included on the statistics page. In general, data gaps of a few days or less were bridged and those of greater duration were left as missing values.

SALINITY

Twenty-nine instruments returned some conductivity data. The data were corrected by comparing the recorded data to historical hydrographic data from the region. At high latitudes, isopycnals undergo large depth changes, so all corrections were applied in potential temperature-salinity $(\theta$ -S) space. The upper and mid-level waters of the region may belong to one of several distinct θ -S regimes, but the deeper waters follow a nearly linear θ -S relation with very little scatter. Where possible, the deep θ -S relation was used to correct the data.

For convenience, daily subsamples of the 40-hour low passed data were used in the correction

Figure 2 (a-c). Cummulative salinity corrections applied to ABC's Mooring 9.



procedure. The corrections were subsequently applied to the six-hourly subsampled data.

Potential temperature-salinity points from the current meter data were first plotted to identify regions where the relation should be tight. Frequently this region was associated with mooring blowover into Circumpolar Deep Water with its linear θ -S relation. Historical hydrographic data were used to fit a line or curve to the region of interest for each mooring. The offsets between the curve-fit and the conductivity-temperature pairs in the fitted region were then calculated. The number of points in the fitted region is listed in the next to last column of Table 2. All subsequent corrections were determined from this subset of points and applied to the entire data set.

Offsets were plotted as a function of time to determine the drift (if any) of the conductivity sensor. In all cases but one, the drifts were negative, implying a trend toward lower conductivity with time. The instrument at moorir g 8 at 2335 appeared to have a very slight positive drift. The values for drift listed in Table 2 should not be interpreted too literally: conductivity is a weak function of salinity, and a strong function of pressure and temperature, so the drifts may be influenced by the character of the temperature signal, or the pressure versus time record for each mooring.

Two instruments (1 at 2080 m and 14 at 2465 m) had unexplained shifts in salinity during the course of the deployment. An additional offset was applied to these records for all points after the shift.

After offset and drift corrections were applied, the current meter data were again compared to the curve-fit historical data. This time, the residuals were plotted as a function of recorded pressure. About half the instruments recorded conductivities that were too high with increasing pressure (during blow-over events). Linear pressure corrections were applied. As with the drift correction, the pressure correction does not necessarily imply a pressure dependent error in the conductivity sensor. A pressure dependent error in pressure or even in temperature could produce the same effects.

In Figures 2a-c are shown the cumulative corrections applied to mooring 9 at 1600 m. Figure 2a is the potential temperature versus salinity plot for an offset correction has been applied. The symbols are pairs from hydrographic stations in the vicinity of the mooring and the envelope of these data is enclosed in solid lines. Figure 2b shows the data after removal of the trend in time. The trend was removed based on the offsets from the curve-fit hydrographic data colder than 1.5°C. (The drift correction also leads to a slightly different offset value.) Figure 2c shows the

ABYSSAL BOUNDARY CURRENT STUDIES CONDUCTIVITY CORRECTIONS

	Cond. offset	Drift	Pressure Corr.	θ-S fit			Std.
Instrument	(mmho/cm)	(mmho/cm/day)	$(= A_1 + A_2 * P)$	$(S=B_1+B_2+\theta+B_3+\theta^2)$) Fit for	# points	dev
1 at 1300	419	32 E-4	none	$B_0 = 34.944$ $B_1 =55017$ $B_2 = .44829$ $B_3 =12026$	θ < 2°C	410	.0141
1 at 2080 ¹	235	85 E-4	none	$B_0 = 34.677$ $B_1 = .06179$ $B_2 =01961$	θ < 1.5	409	.0062
1 at 2435	434	60 E-4	none	$B_0 = 34.682$ $B_1 = .04380$	θ < 0.8	126	.0048
2 at 1575	262	10 E-3	none	$B_0 = 34.571$ $B_1 = .23496$ $B_2 =08858$	θ < 2	237	.0158
3 at 835	315	60 E-4	$A_0 = .07202$ $A_1 =9488E-4$	$B_0 = 33.334$ $B_1 = 3.8996$ $B_2 = -4.0799$ $B_3 = 1.8947$ $B_4 =33077$	1.1< θ <2.3	316	.0267
3 at 1585	174	70 E-4	$A_0 = .0799$ $A_1 =4846E-4$	$B_0 = 35.1276$ $B_1 =93108$ $B_2 = .70391$ $B_3 =17583$	θ < 1.8	227	.0348
3 at 2355	187	17 E-4	$A_0 = .19674$ $A_1 =8209E-4$	$B_0 = 34.682$ $B_1 = .03422$ $B_2 = .01359$	θ < 1.5	414	.0116
4 at 985	278	79 E-4	$A_0 = .22622$ $A_1 =15451E-3$	$B_0 = 34.673$ $B_1 = .05870$	θ < 2	54	.0213
4 at 1750 ²	270	.none	none	by eye	all values	114	.0411
4 at 2520	292	80 E-4	$A_0 = .20107$ $A_1 =7339E-4$	$B_0 = 34.673$ $B_1 = .05870$	θ < 1.4	143	.0099
5 at 1750	oi	f scale					
5 at 2465	flooded —	uncorrectable					
6 at 810	127	50 E-4	none	$B_0 = 41.686$ $B_1 = -4.4231$ $B_2 = .63842$	2.4< θ <3.0	25	.0547
6 at 1580	209	156 E-3	$A_0 = .1612$ $A_1 =88312E-4$	$B_0 = 34.675$ $B_1 = .052402$	θ < 2.2	72	.0229
6 at 2330	209	104 E-2	$A_0^1 =127$ $A_1 = .38111E-4$	$B_0^1 = 34.675$ $B_1 = .052402$	θ < 2.5	57	.0173

	Cond. offset	Drift	Pressure Corr.	θ-S fit			Std.
Instrument	(mmho/cm)	(mmho/cm/day)	$(= A_1 + A_2 * P)$ (3)	$S=B_1+B_2*\theta+B_3*\theta^2$) Fit for	# points	dev
7 at 2365			off scale				
8 at 820	150	165 E-3	$A_0 = .06405$ $A_1 =7102E-4$	same	θ < 1.9	114	.0133
8 at 1540	138	30 E-4	$A_0 = .10472$ $A_1 =63416E-4$	same	θ < 1.5	194	.0156
8 at 2335	391	+.20 E-4	$A_0 = .09952$ $A_1 =41489E-4$	same	θ < 2.0	422	.0073
9 at 1600	370	149 E-3	$A_0 = .133$ $A_1 =7841E-4$	same	θ < 1.5	119	.0131
9 at 2355	220	.none	none	same	θ < 1.0	267	.0122
10 at 2535 ³	651	129 E-3	$A_0 = .0551$ $A_1 =29459E-4$	same	θ < 1.0	241	.0112
11 at 2805	very noisy	uncorrectable					
12 at 955	548	18 E-3	$A_0 = .17264$ $A_1 =2043E-3$	same	θ < 2.1	103	.0247
12 at 1715	215	58 E-4	$A_0 = .100$ $A_1 =61575E-4$	same	θ < 1.8	102	.0147
12 at 2490	227	26 E-4	none	same	θ < 1.0	156	.0063
13 at 1720	no pressure	- uncorrectable					
13 at 2445 ⁴	250	none	none		fit by eye		
14 at 2465 ⁵	481	74 E-4	none.	same	θ < 1.5	307	.0072

Table 2. Abyssal Boundary Current Studies conductivity corrections.

 $[\]frac{1}{2}$ additional offset of +.033 added after yearday 166 two separate θ -S regimes, no curve fit possible $\frac{1}{3}$ 70% of the pressures were generated artificially. An additional correction as a function of potential temperature was applied: Corr. = .02731 — .036465*PT This correction does not imply any sensor error, but rather an expedient method of aligning the θ -S curve with historical data. ten day record 5 additional offset of +.020 added after yearday 164

final data after application of a linear pressure correction. Most of the points are not changed by the pressure correction, but there is a reduction in the scatter at low temperatures.

DATA PRESENTATION

Each of the current meter records is described in this report. The descriptions include start times and stop times, statistics for each variable, frequency histograms and spectra, and some representative time series plots of the velocity, temperature, pressure, and salinity observations.

The data are organized by mooring location. Each section begins with a timeline showing the instrument depths for each mooring period, and the duration of good data from each sensor: speed (s), direction (θ) , temperature (T), pressure (P), and salinity (Sal).

The page of statistics gives the mean, variance, and extrema for speed (s), eastward (u) and northward (v) components of the current, temperature (T), pressure (P), and salinity (Sal). It also includes information about dates of installation and recovery, and notes on the quality of each record. Statistics for both unfiltered and filtered (LLP) information are provided.

The presentation of the hourly unfiltered data begins with histograms, scatter plots, and progressive vector diagrams. The histograms of speed, direction, temperature, pressure and salinity show the frequency of occurrence versus amplitude. The scatter diagrams show the distribution of hourly values of speed and direction. For clarity, the low speeds (< 1.5 cm/sec) have been excluded from these plots. The progressive vector diagrams are obtained by placing the velocity vectors tail-to-head to show the path that a particle would travel in a perfectly homogeneous flow. The squares mark the beginning of each month. Kinetic energy spectra of u and v, and variance density spectra of temperature conclude the presentation of unfiltered hourly data. LLP filtered data are presented next as time series plots. There are two series of plots for each current meter mooring: all variables (velocity vectors, u, v, temperature, pressure, and salinity) at each depth on the mooring, and each variable at all depths.

ACKNOWLEDGEMENTS

The funds for this program were provided via grant OCE-8416539 from the National Science Foundation, Physical Oceanography Program which is gratefully acknowledged. We appreciate the assistance and cooperation given by the masters and crews of the R/V Melville and R/V Conrad, and by our seagoing colleagues and companions on the deployment and recovery cruises.

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MOORING 1

49°29.60S, 41°16.20W

1987	JAN FEB MAR APR					
1986	B MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN	1300 M		M 0802	2495 M	
	JAN FEB		N 2	v = ·	3	were 3

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DATA RETURN FROM MOORING 1.

MOORING 1 UNFILTERED HOURLY DATA

1300M AT MOORING 1. 1100 27 JAN 86 - 1700 28 MAR 87. TAPE 3125/38.

	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
S U V T P	-15.48 3.27	12.75 6.17 0.17	0.97	28.60 39.80 2.59	10207 10207	•	MAR 87) MAR 87) MAR 87)
20	SOM AT MOS	RING 1.	1100 27	JAN 86 -	1600 28	MAR 87. T	APE 4576/5.
S U V T P	-22.45 1.15	15.08 4.94 0.19	-23.60 0.55	20.10 25.60 1.90	10206 10206 10206	(1600 28	MAR 87) MAR 87) MAR 87)
24	35M AT MOO	RING 1	1100 27 J	JAN 86 - 1	1600 28	MAR 87. T	APE 7353/12.
S U V T P		14.84 5.67 0.16	0.80 -85.20 -20.40 0.46 2467.10	19.80 46.80 1.39	10206 10206		MAR 87) MAR 87) MAR 87)

(2435 M) SPEED BRIDGES, LINES: 1172 - 1181 (0600 17 MAR 86 - 1500 17 MAR 86) 2693 - 2702 (19 MAY 86) 3164 - 3183 (8 JUN 86)

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB.)

MOORING 1. LLP FILTERED 6-HOURLY DATA.

1300 M AT MOORING 1. 1200 28 JAN 86 -1200 27 MAR 87. TAPE 3125/38.

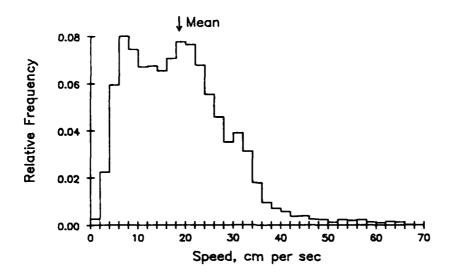
	MEAN	SD	MIN	MAX	LENGTH	ENDS AT	
U V T P S	-15.54 3.27 1.83 1339.55 34.71	0.16 34.82	-25.14 1.04 1318.60	2.47 1644.01	1693 1693 1693	(1200 27 MAR (1200 27 MAR (1200 27 MAR	87) 87) 87)
20	80 M AT MO	ORING 1.	1200 28	JAN 86 -	0600 27	MAR 87. TAPE	4576/5.
U V T P S	1.36 2125.52	3.35 0.18 18.81	-12.63 0.60	11.06 1.82 2289.76	1692 1692 1692	(0600 27 MAR (0600 27 MAR (0600 27 MAR	87) 87) 87)
24	35M AT MOO	RING 1.	1200 28	JAN 86 -	0600 27	MAR 87. TAPE 7	353/12.
U V T P S	1.04 2485.65	3.92 0.16	-7.53 0.48	2517.43	1692 1692 1692		87) 87) 87)

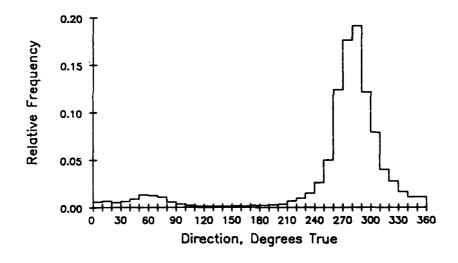
(1300 M) GAPS IN SALINITY RECORD, BAD VALUES REMOVED.

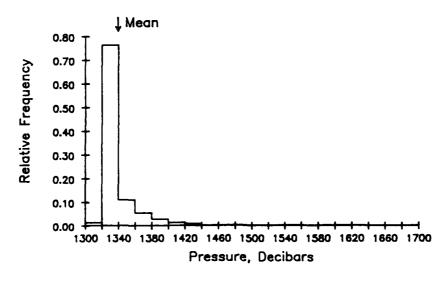
(2435 M) BRIDGES IN UNFILTERED SPEED RECORD

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

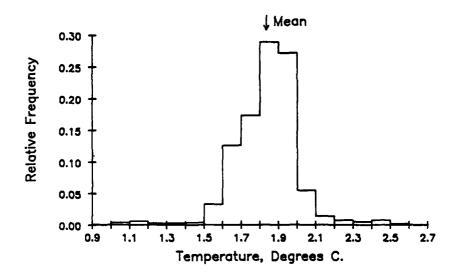
1300 METERS AT MOORING 1. TAPE 3125/38.

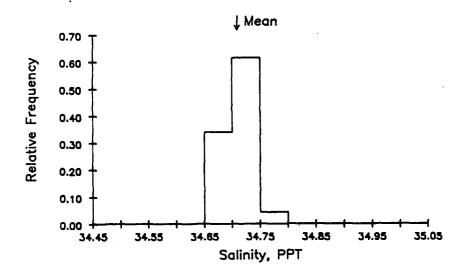




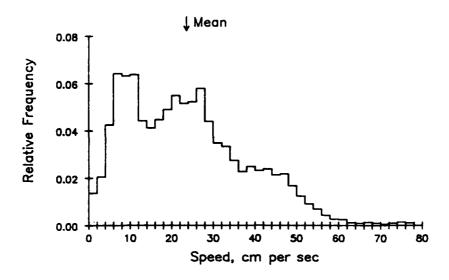


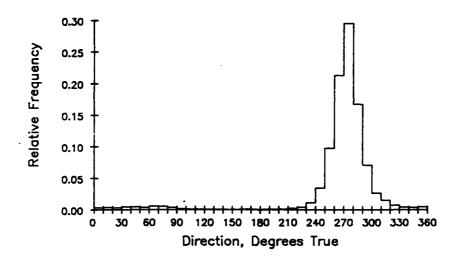
1300 METERS AT MOORING 1. TAPE 3125/38.

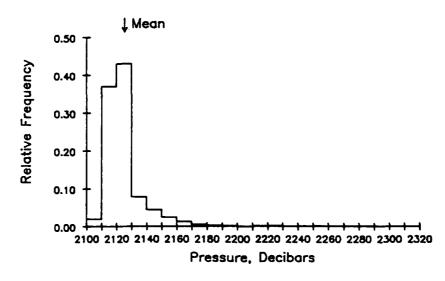




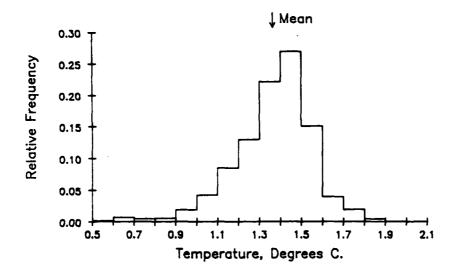
2080 METERS AT MOORING 1. TAPE 4576/5.

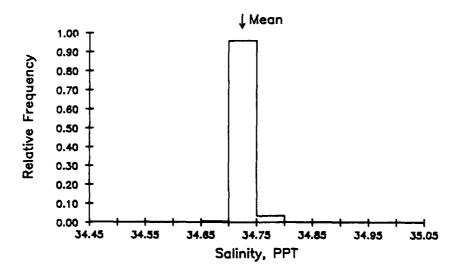




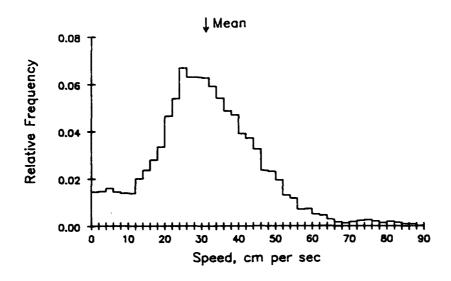


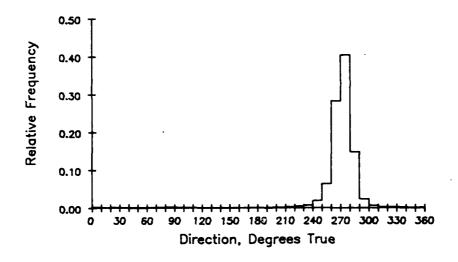
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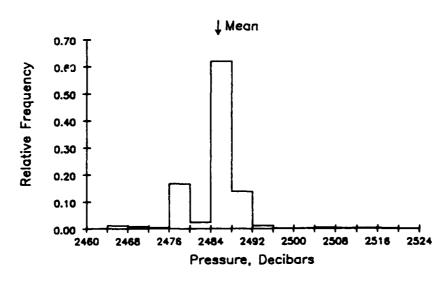




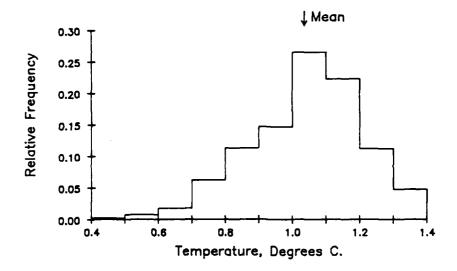
2435 METERS AT MOORING 1. TAPE 7353/12.

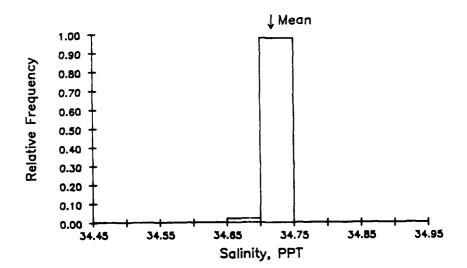




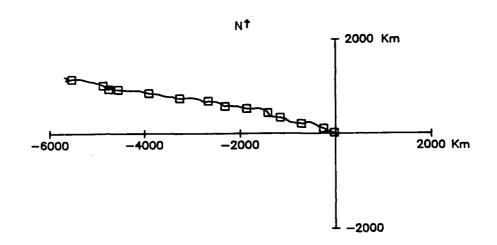


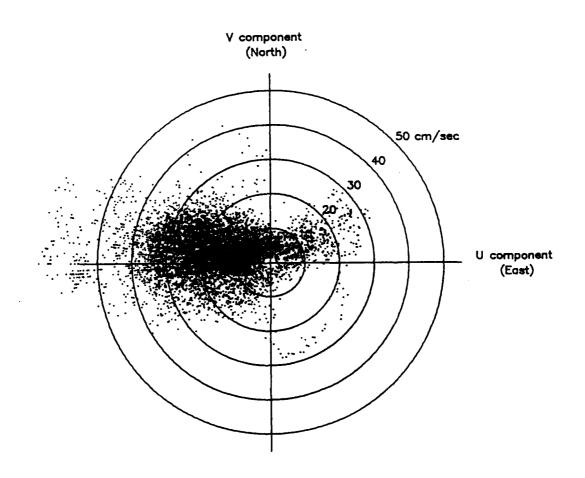
2435 METERS AT MOORING 1. TAPE 7353/12.



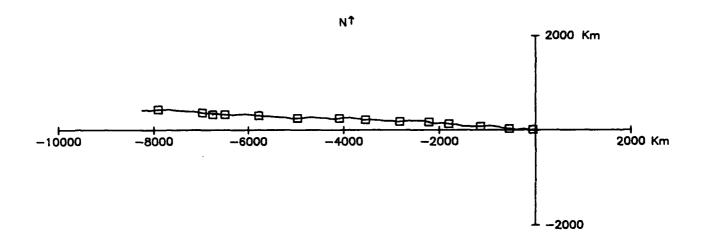


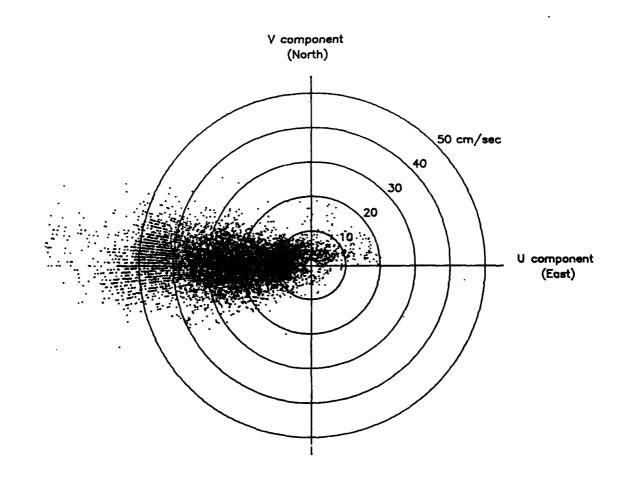
1300M AT MOORING 1. 27 JAN 86 - 28 MAR 87. TAPE 3125/38.



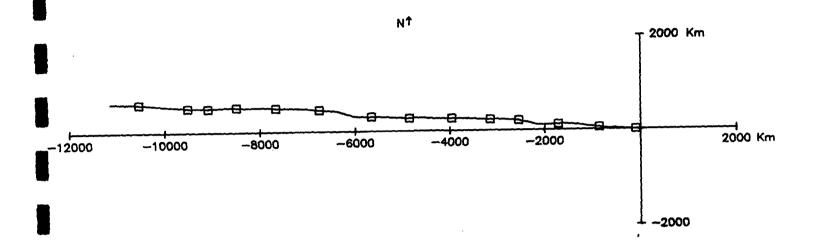


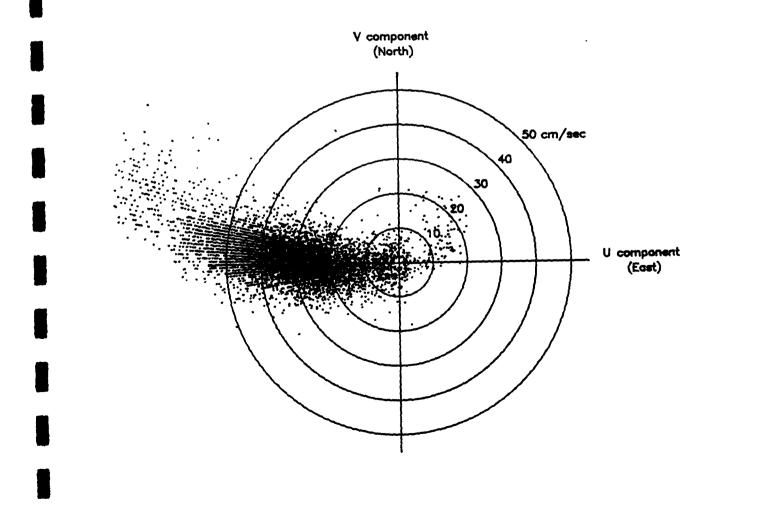
2080M AT MOORING 1. 27 JAN 86 - 28 MAR 87. TAPE 4576/5.

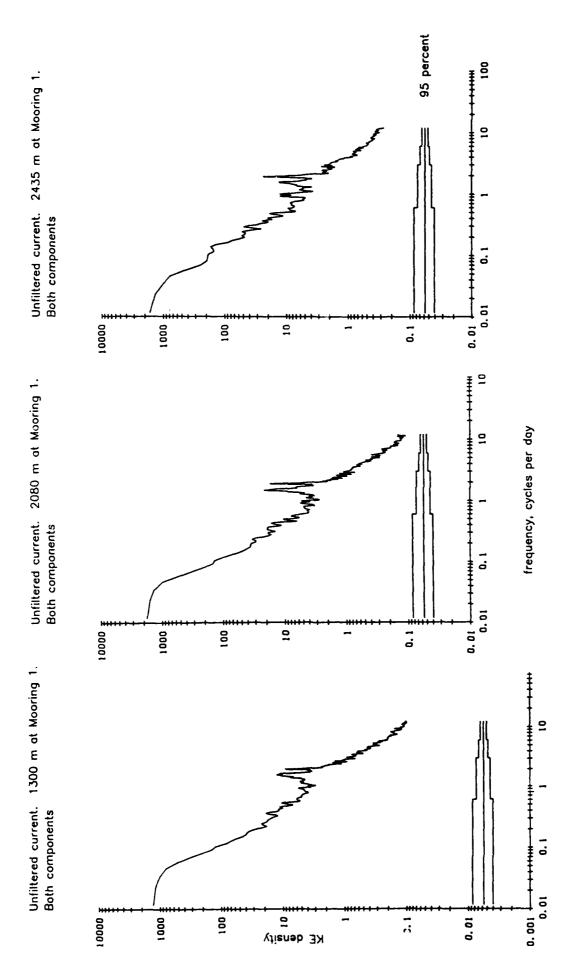


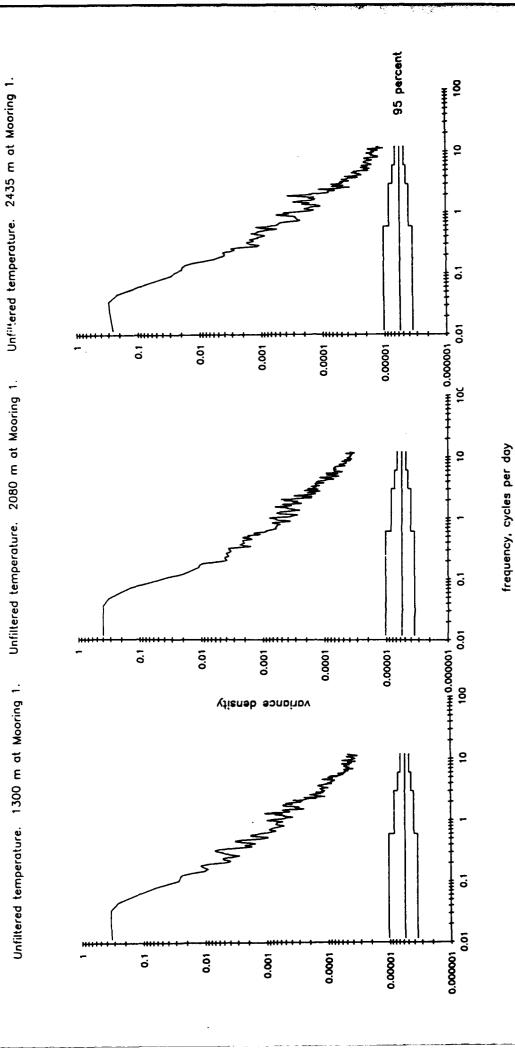


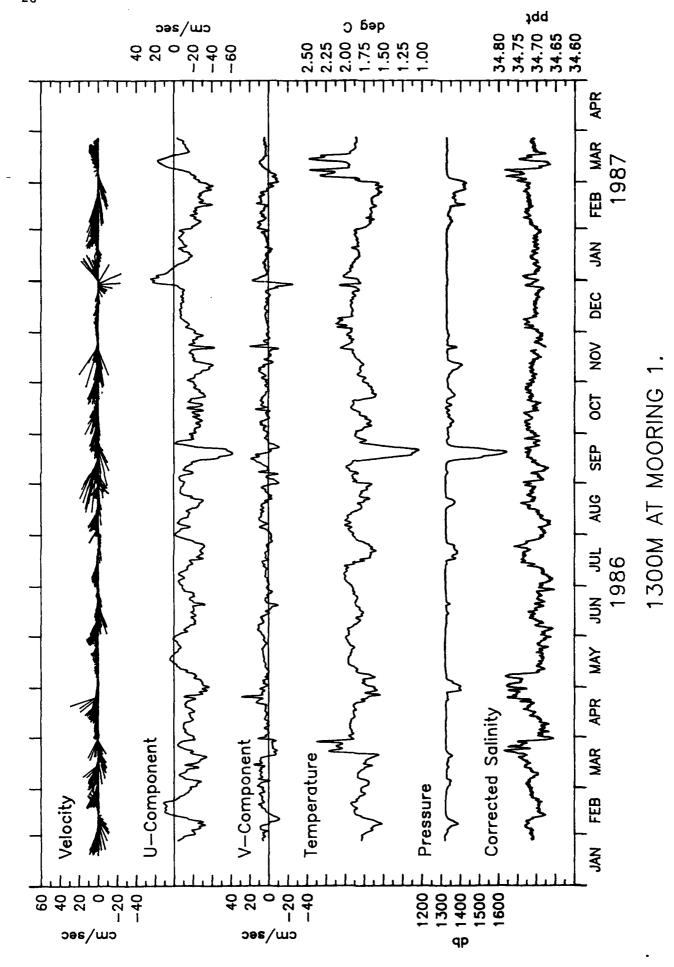
2435M AT MOORING 1. 27 JAN 86 - 28 MAR 87. TAPE 7353/12.

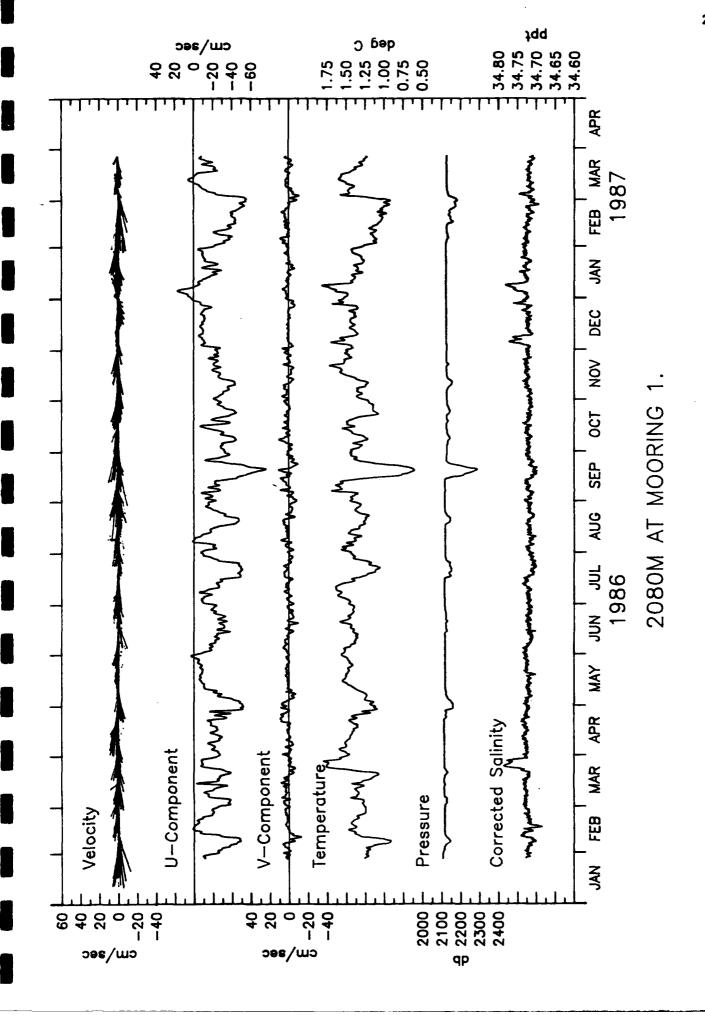


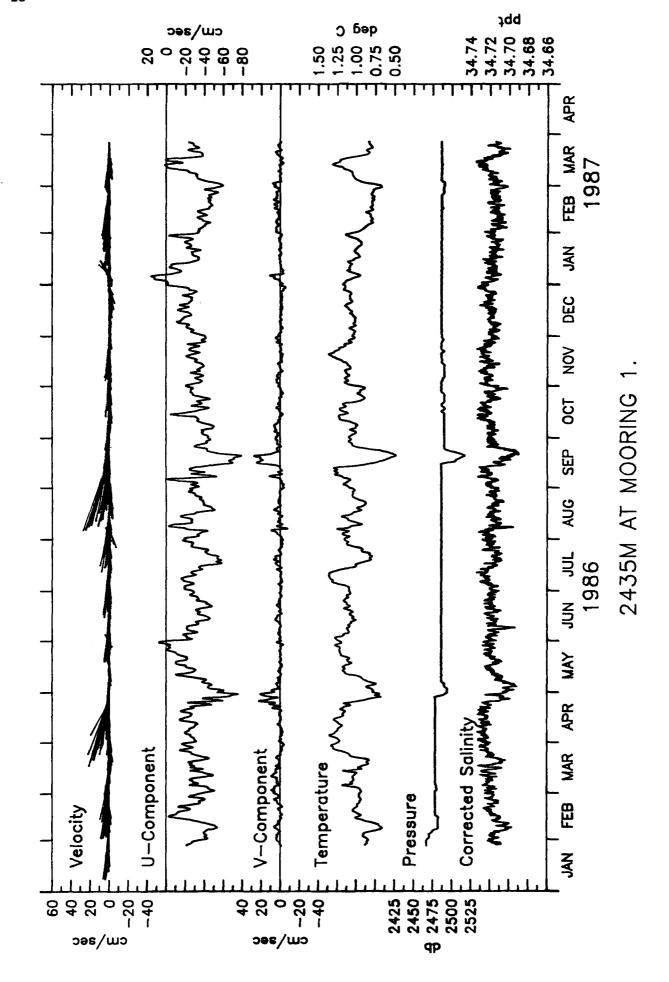


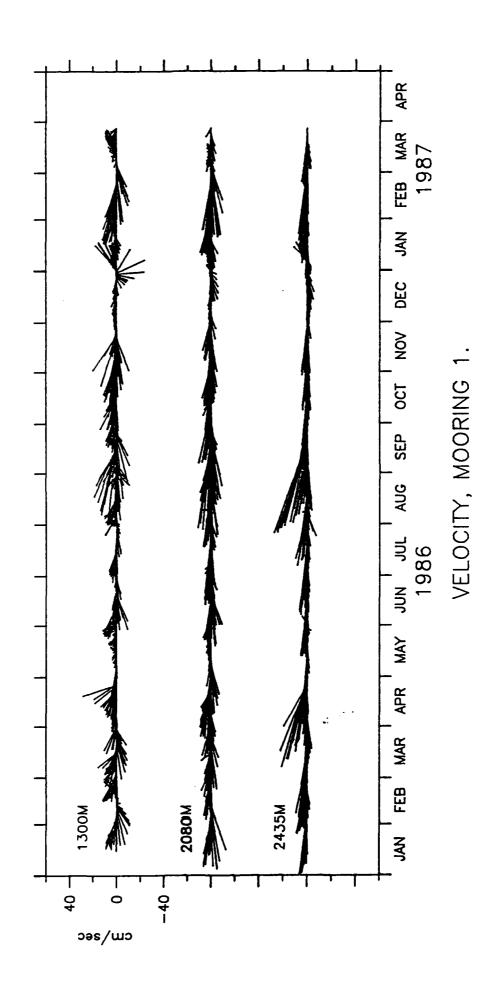


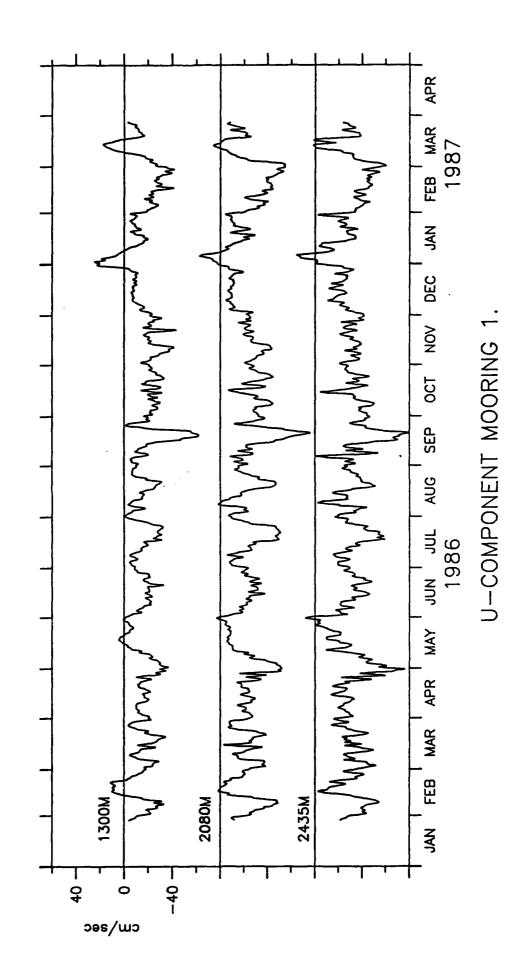


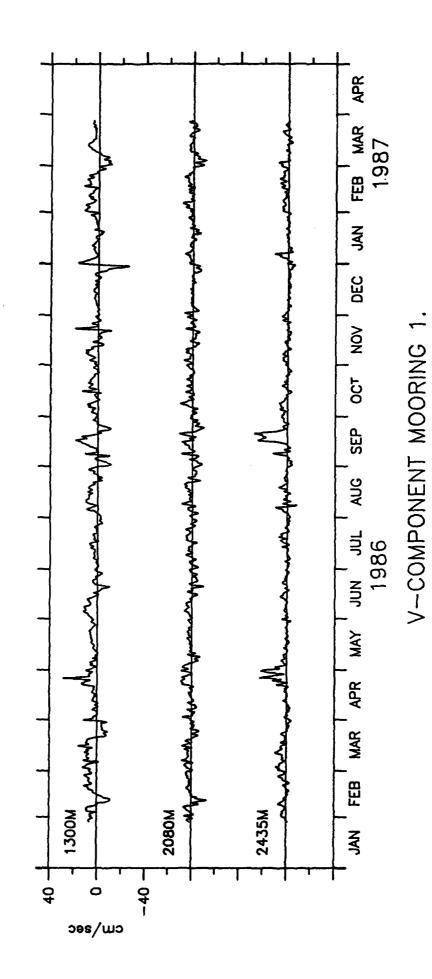


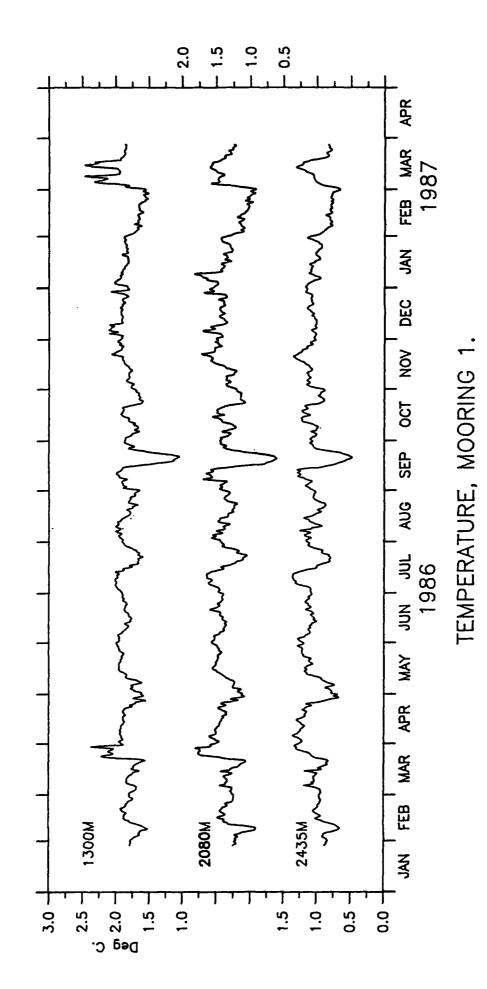


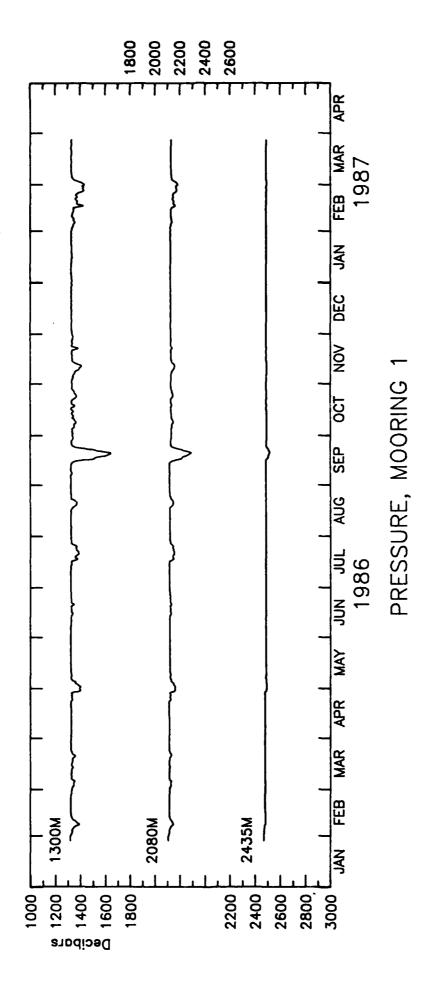


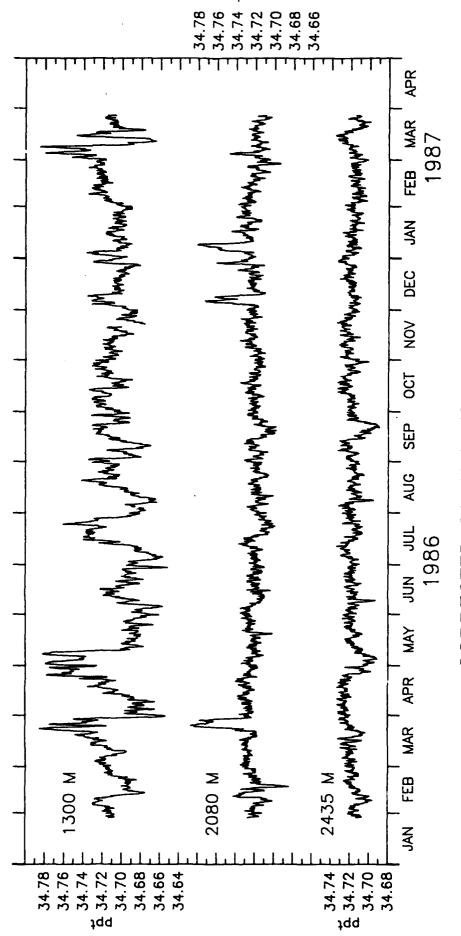










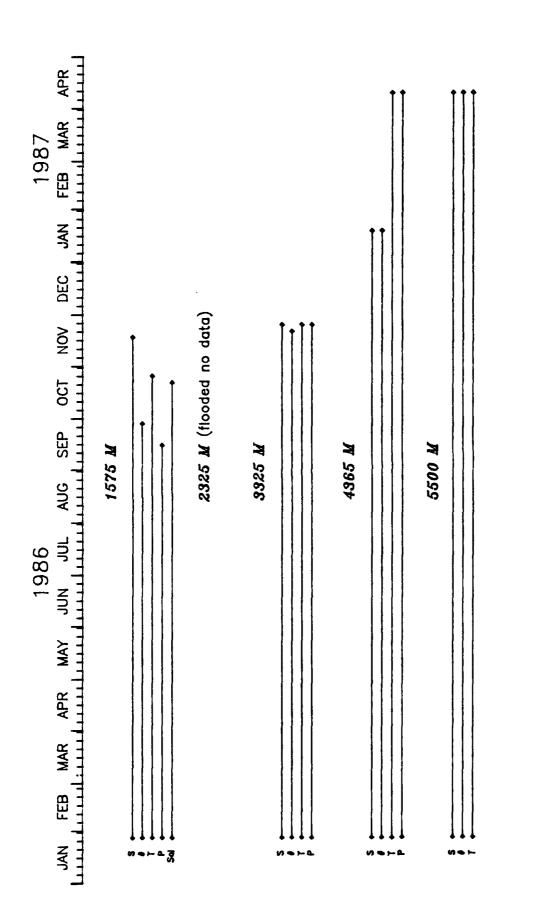


ppt

CORRECTED SALINITY AT MOORING 1.

MOORING 2

49°21.03'S, 41°18.30'W



<u> Աստանաստանաստնուտ հասանաստանաստանաստանաստանաստես հասանաստանուտ հասանաստանուտ հասանաստանուտ հետանաստան</u> DATA RETURN FROM MOORING 2.

And the second s

MOORING 2. HOURLY UNFILTERED DATA.

1575M AT MOORING 2. 1700 27 JAN 86 - 1700 19 NOV 86. TAPE 6736/14.

	MEAN	SD	MIN	MAX	LENGTH	ENDS 2	АT				
s	13.93	8.13	0.80 -55.40	56.20	7105	(1700 1	9 NOV 86)				
Ŭ	-5.94	11.87	-55.40	24.50	5899	(1100 3	O SEP 86)				
V	4.06	7.71	-21.00	38.10	5899	(1100 3	O SEP 86)				
T	1.81	0.29	0.35	2.65	6555	(1900 2	7 OCT 86)				
P	1642.72	77.35	1596.10	2133.30	5478	(0300 1	7 SEP 86)				
2325M AT MOORING 2.		TAPE 4575		FLOODED, NO DATA		ГA					
33	25M AT MO	ORING 2.	1700 27 3	JAN 86 -	2300 26	NOV 86.	TAPE 497/63.				
_											
						(2300 2					
							3 NOV 86)				
							3 NOV 86)				
T	0.44	0.14	0.06	0.85	7279	(2300 2	6 NOV 86)				
P	3459.32	113.53	3376.00	4500.00	7279	(2300 2	6 NOV 86)				
4365M AT MOORING 2.		1700 27 3	JAN 86 -	1300 12	APR 87.	TAPE 3190/26.					
_											
	12.71	9.31	0.80	53.00	8603	(0300 2	1 JAN 87)				
U	-9.67	11.38	-50.90	20.30	8603	(0300 2	1 JAN 87)				
	0.79	4.96	-26.70	24.70	8603	(0300 2	1 JAN 87)				
	0.19	0.04	0.05	0.49	10557	(1300 1	2 APR 87)				
P	4524.85	103.67	4400.00	5092.00	10557	(1300 1	2 APR 87)				
-	FOOM NO W	0007110 0	1700 07	73.4.06			53.55 53.66 /4.6				
2	DOUM AT MO	OURING 2.	1700 27	JAN 86 -	1300 12	APR 87.	TAPE 5109/10.				
s	15.94	13.56	0.80	64.30	10557	(1300 1	2 APR 87)				
	-10.73	16.19	-57.50	61.60	10557	(1300 1	2 APR 87)				
v	2.56	7.36	-57.50 -32.20	38.20	10557	(1300 1	2 APR 87)				
m			0.06			•	2 AFR 07)				

(Speed, u, and v are given in cm/sec, Temperature in 'C, Pressure in DB.)

0.28 10557

(1300 12 APR 87)

0.06

T

0.16

0.05

MOORING 2. HOURLY UNFILTERED DATA

(1575 M) ENTIRE RECORD SHORT, LOW BATTERY VOLTAGE. SPEED RECORD BRIDGED, LINES:

453 - 465 (1300 15 FEB 86 - 0100 16 FEB 86)

OFFSCALE PRESSURE VALUES, GAPS IN LINES:

250 - 282 (1800 8 FEB 86 - 1000 9 FEB 86)

310 - 320 (1400 9 FEB 86 - 0000 10 FEB 86)

1196 - 1211 (1200 18 MAR 86 - 0300 19 MAR 86)

1279 - 1292 (2300 21 MAR 86 - 1200 22 MAR 86)

1298 - 1307 (1800 22 MAR 86 - 0300 23 MAR 86).

(3325 M) ENTIRE RECORD SHORT, LOW BATTERY VOLTAGE.

(4365 M) POOR DATA QUALITY IN SPEED AND DIRECTION AFTER 21 JAN 87, RECORDS TERMINATED EARLY.

MOORING 2. LLP FILTERED 6-HOURLY DATA

1575M AT MOORING 2. 1800 28 JAN 86 - 1800 26 OCT 86. TAPE 6736/14.

,										
	MEAN	SD	MIN	MAX	LENGTH	EMDS AT				
Ħ	-5.99	11.56	-49.16	22.56	975	(0600 29 SI	EP 86)			
v	4.03	7.21	-17.22	27.61	975	(0600 29 SI	EP 86)			
T	1.81	0.29	0.43	2.55	1085	(0600 29 SI (1800 26 O	CT 86)			
P	1631.86	47.32	1596.70	2005.96	878	(0000 16 SI	EP 86)			
s	34.72	5.71	34.60	34.83	1072	(1200 23 00	CT 86)			
2325M AT MOORING 2. FLOODED, NO DATA. TAPE 4575										
3325M AT MOORING 2. 1800 28 JAN 86 - 1800 25 NOV 86. TAPE 497/63.										
TT	-10 58	11 10	-52 48	12 22	1101	(0600 22 N	N 861			
						(0600 22 N				
Tr.	0.44	0 14	0.11	0 84	1205	(1800 25 N	OV 86)			
P	3459.52	113.21	3381.76	4427 11	1205	(1800 25 N	OV 86)			
•		113.21	3301.70	442/111	1203	(1000 25 11	3, 00,			
43	65M AT MOO	RING 2.	1800 28 J	AN 86 -	0600 11 <i>P</i>	APR 87. TAPE	3190/26.			
U	-9.65	11.09	-43.17	16.36	1425	(1800 19 J	AN 87)			
V	0.79	4.07	-17.72	16.76	1425	(1800 19 Д	AN 87)			
\mathbf{T}	0.19	0.04	0.08	0.44	1751	(0600 11 A)	PR 87)			
P	4524.91	103.41	4412.08	5047.05	1751	(0600 11 AI (0600 11 AI	PR 87)			
						•	•			
5500M AT MOORING 2. 1800 28 JAN 86 - 0600 11 APR 87. TAPE 5109/10.										
25	OOM AT MOO	KING 2.	1800 58 J	AN 86 -	0600 11 A	APK 87. TAPE	5109/10.			
U	-10.77	15.72	-49.60	56.78	1751	(0600 11 A) (0600 11 A)	PR 87)			
V	2.58	6.45	-19.46	28.40	1751	(0600 11 A)	PR 87)			
${f T}$	0.16	0.05	0.07	0.27	1751	(0600 11 A	PR 87)			
					_	•	•			

(1575 M) ENTIRE RECORD SHORT, LOW BATTERY VOLTAGE UNFILTERED SPEED RECORD BRIDGED.
OFFSCALE PRESSURES GAPS IN UNFILTERED RECORD, LLP GAPS, LINES:

35 - 54 (0000 6 FEB 86 - 0000 11 FEB 86)

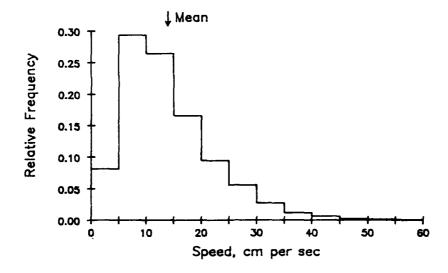
192 - 202 (1200 17 MAR 86 - 0000 20 MAR 86)

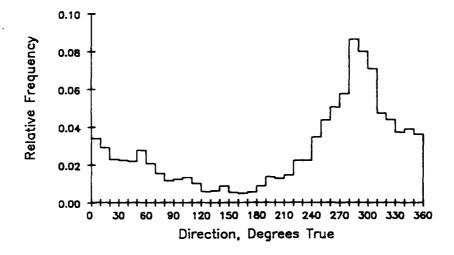
206 - 218 (0000 21 MAR 86 - 0000 24 MAR 86)

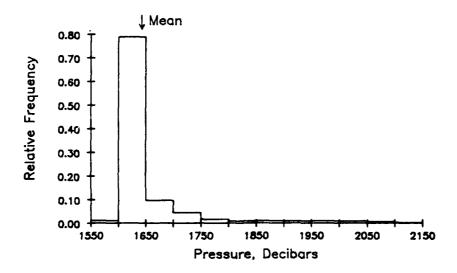
(3325 M) ENTIRE RECORD SHORT, LOW BATTERY VOLTAGE

(4365 M) POOR QUALITY DATA, RECORD TERMINATED EARLY.

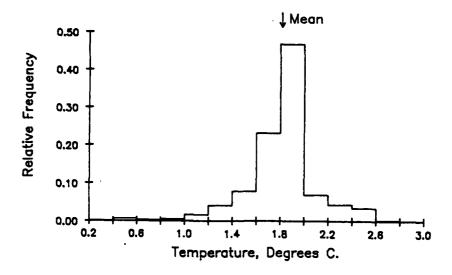
(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

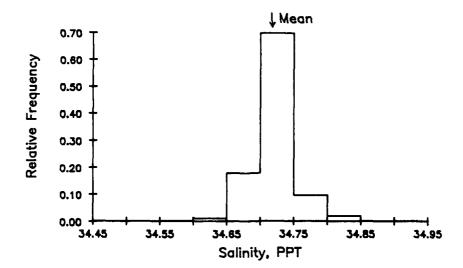




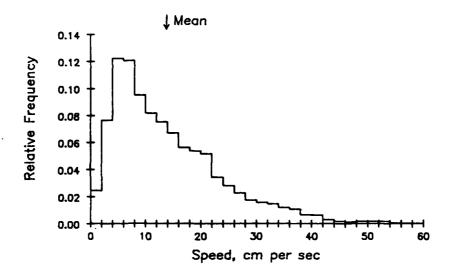


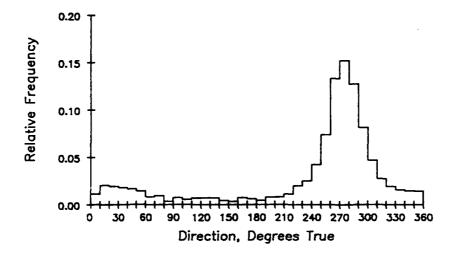
1575 METERS AT MOORING 2. TAPE 6736/14.

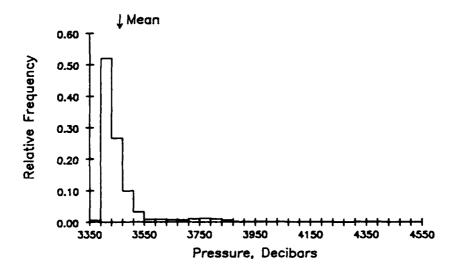




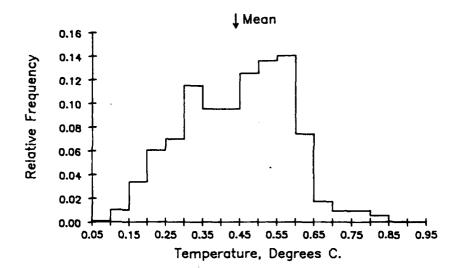
3325 METERS AT MOORING 2. TAPE 497/63.



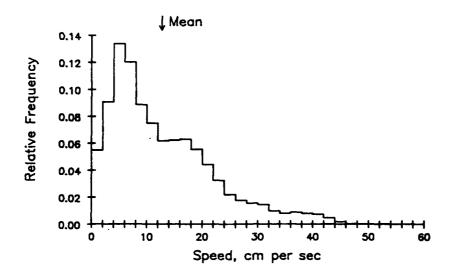


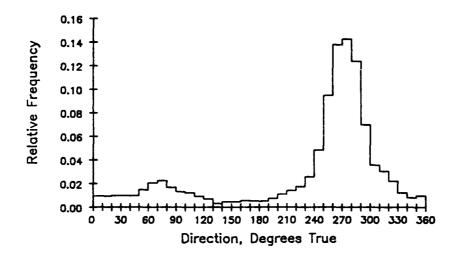


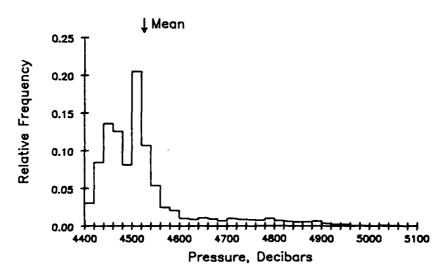
3325 METERS AT MOORING 2. TAPE 497/63.



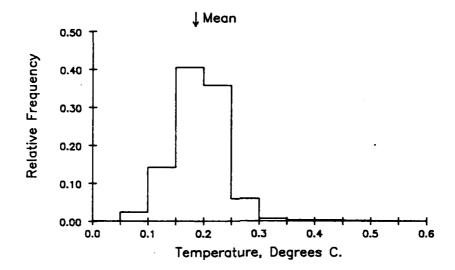
4365 METERS AT MOORING 2. TAPE 3190/26.



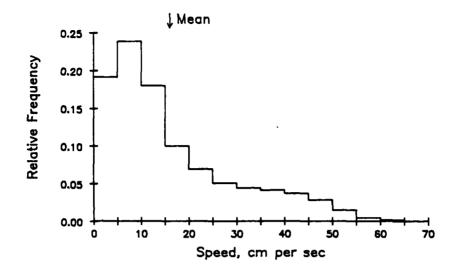


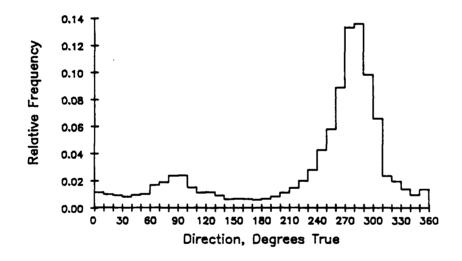


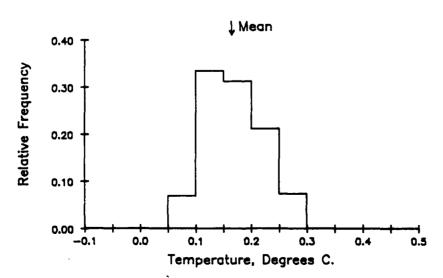
4365 METERS AT MOORING 2. TAPE 3190/26.

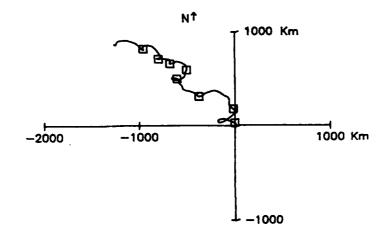


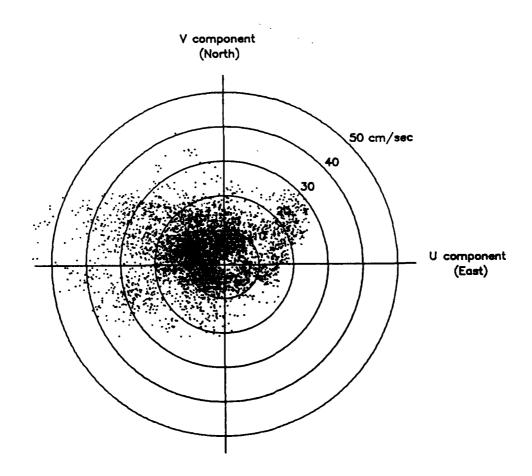
5500 METERS AT MOORING 2. TAPE 5109/10.



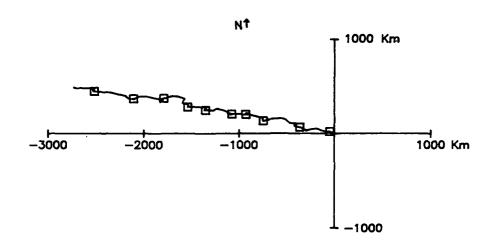


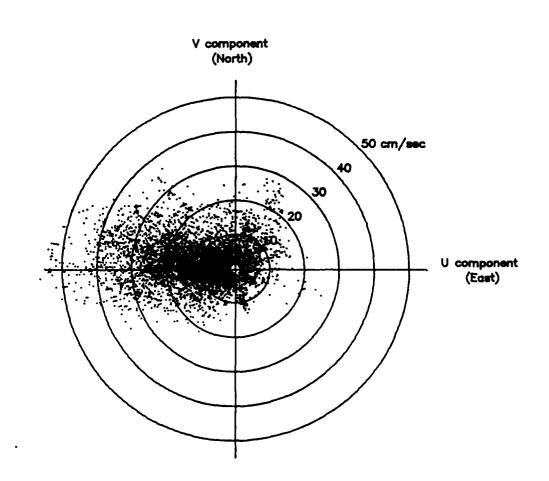




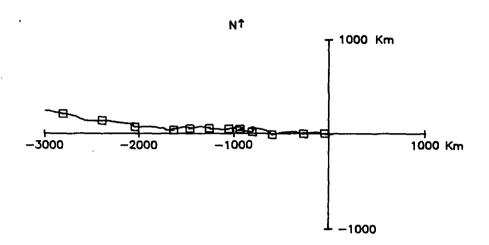


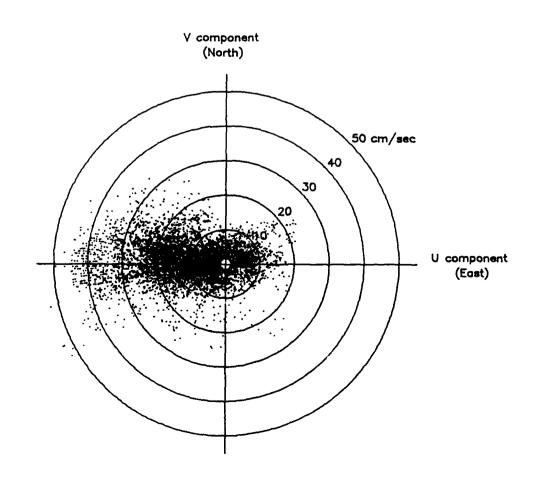
3325 M AT MOORING 2. 27 JAN 86 - 23 NOV 86. TAPE 497/63.

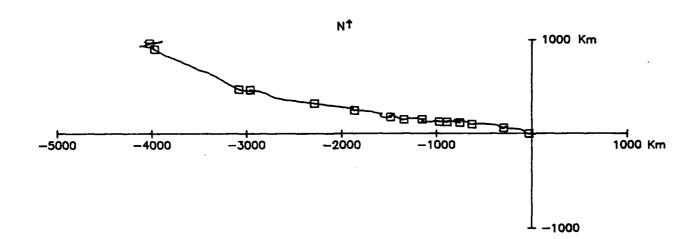


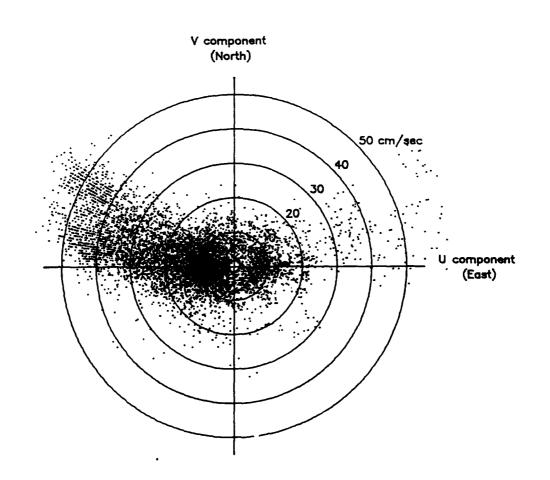


4365M AT MOORING 2. 27 JAN 86 - 12 APR 87. TAPE 3190/26.





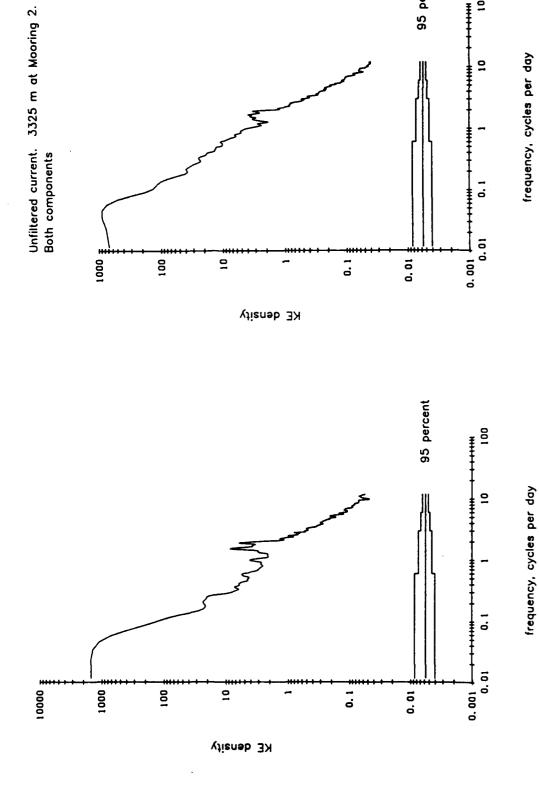




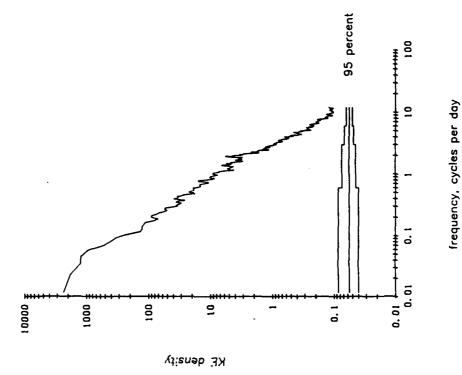
95 percent

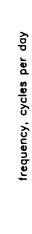
100

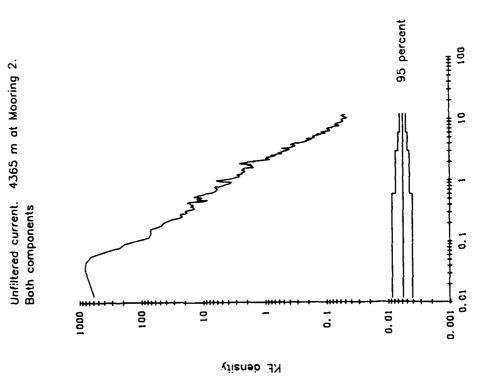
Unfiltered current. 1575 m at Mooring 2. Both components



Unfiltered current. 5500 m at Mooring 2. Both components

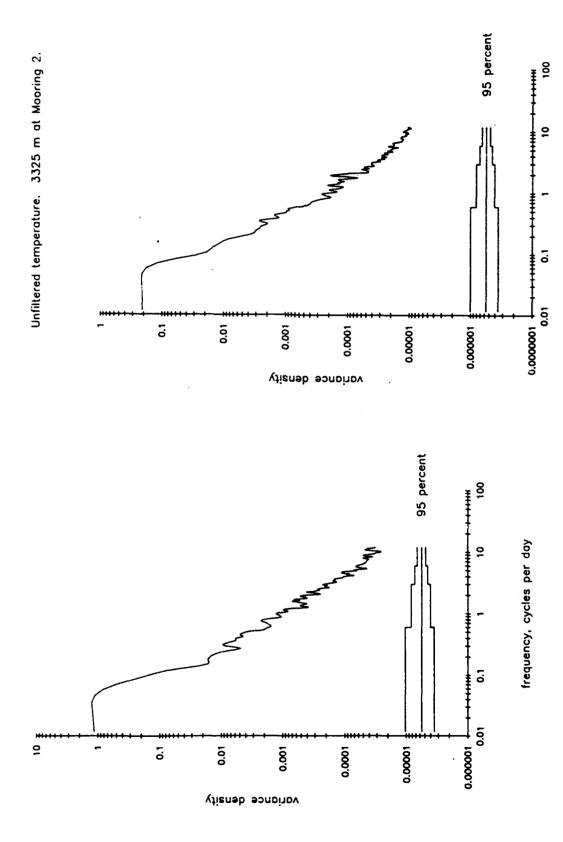


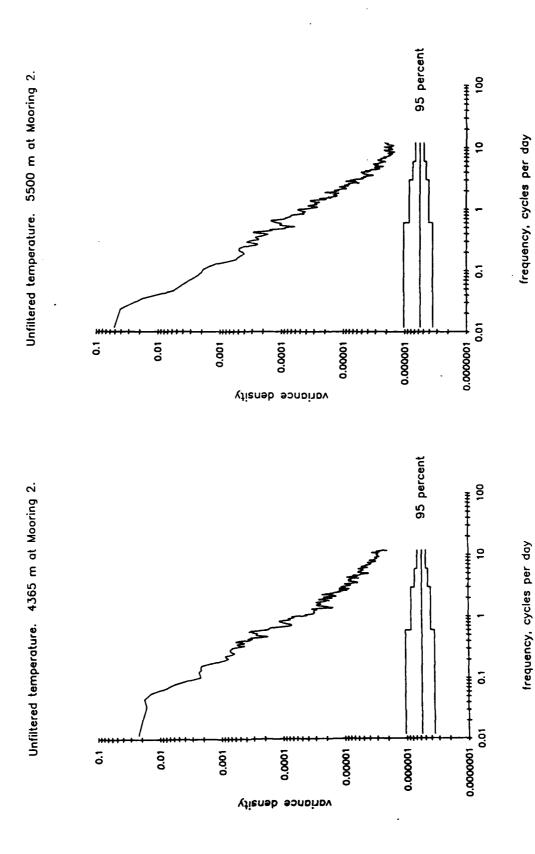


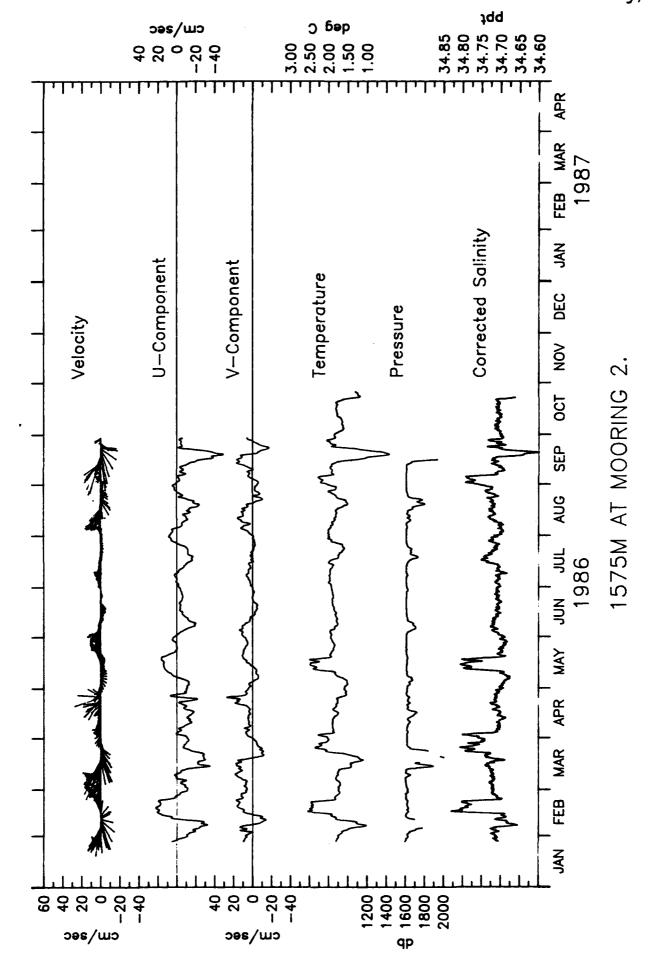


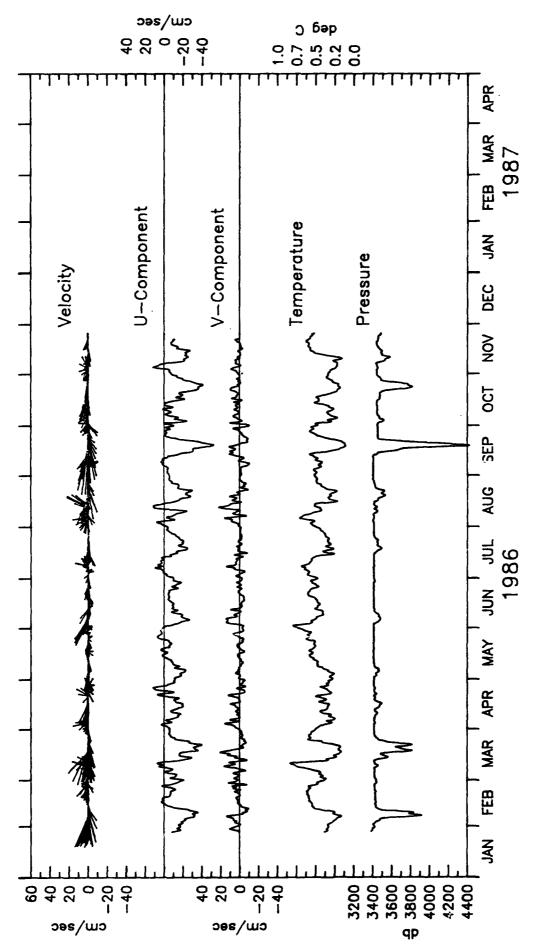
frequency, cycles per day

Unfiltered temperature. 1575 m at Mooring 2.

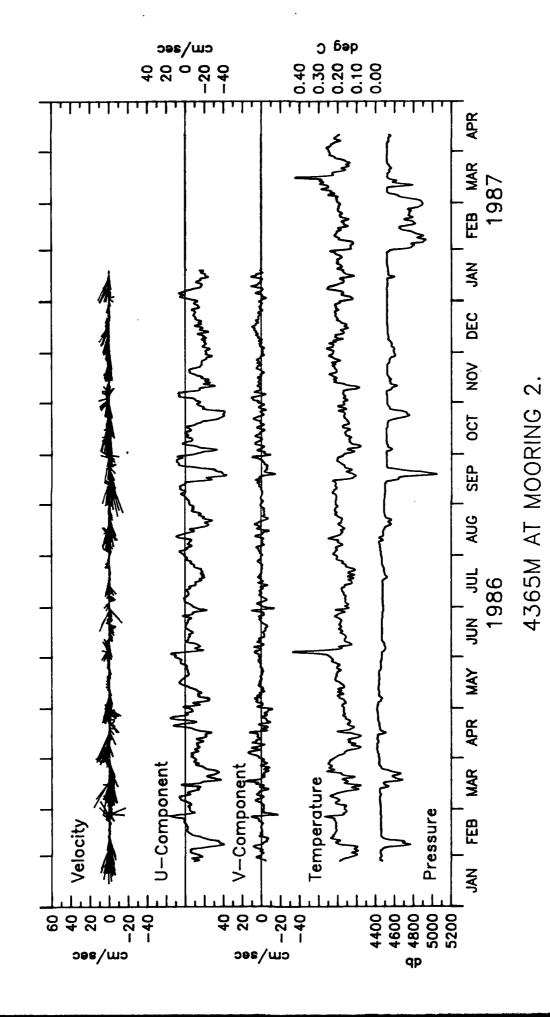


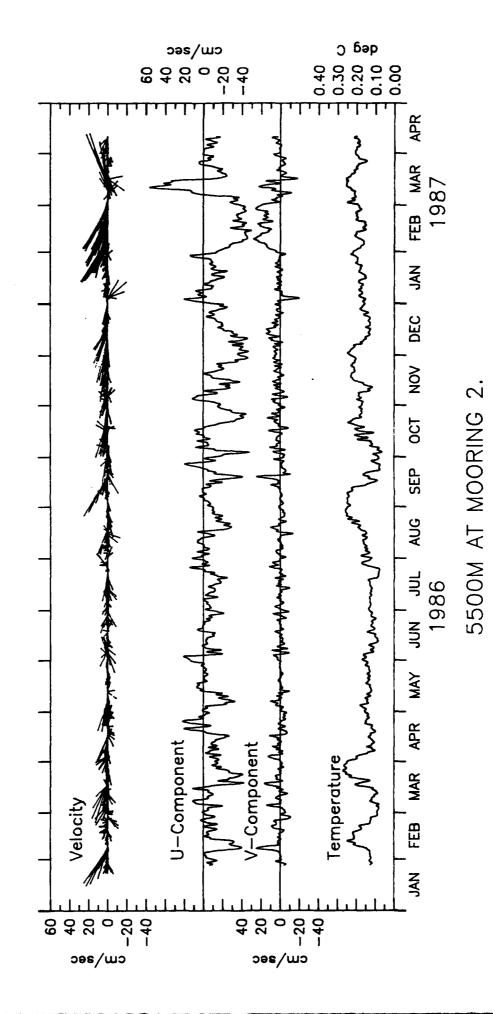


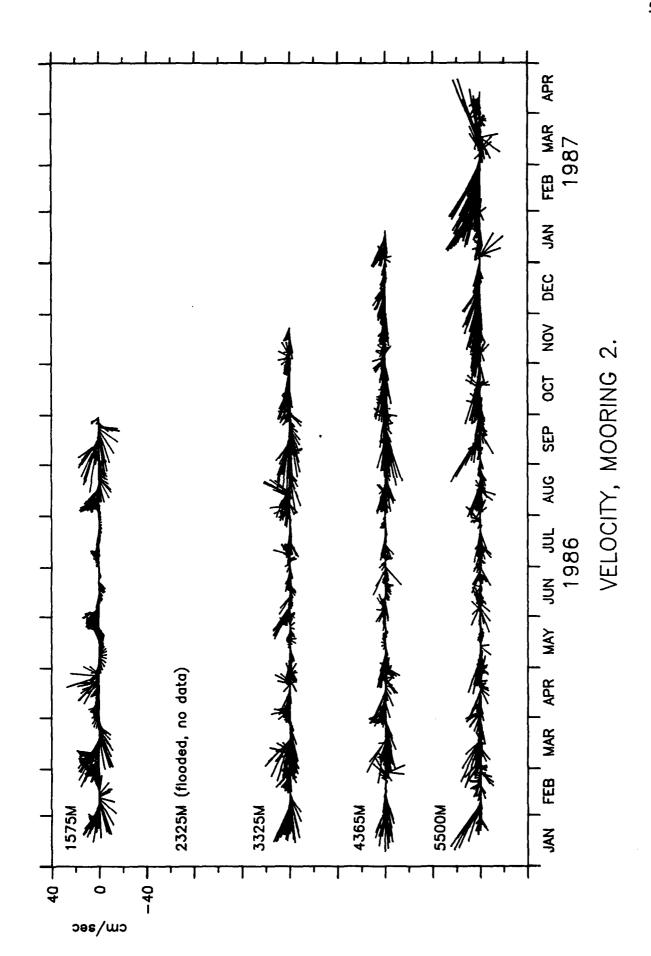


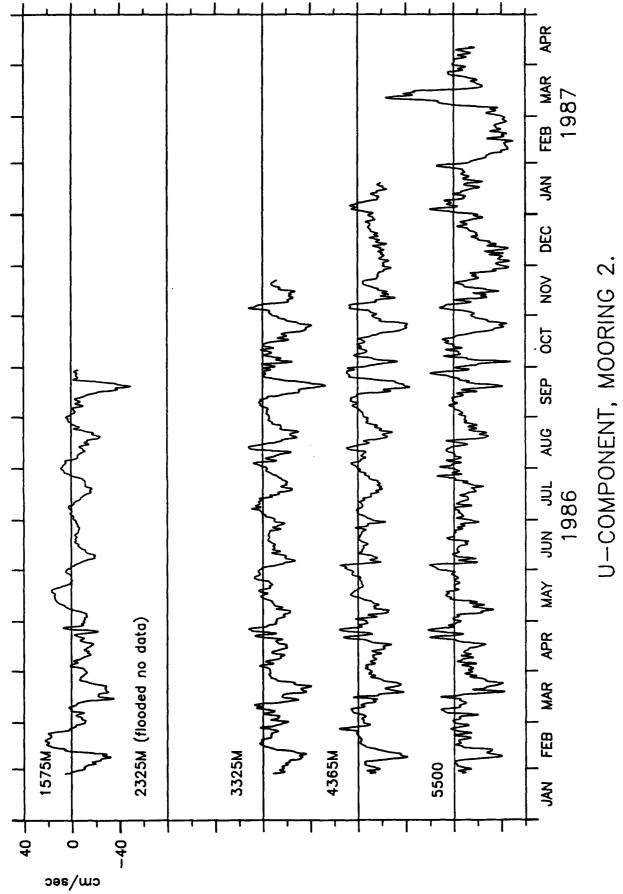


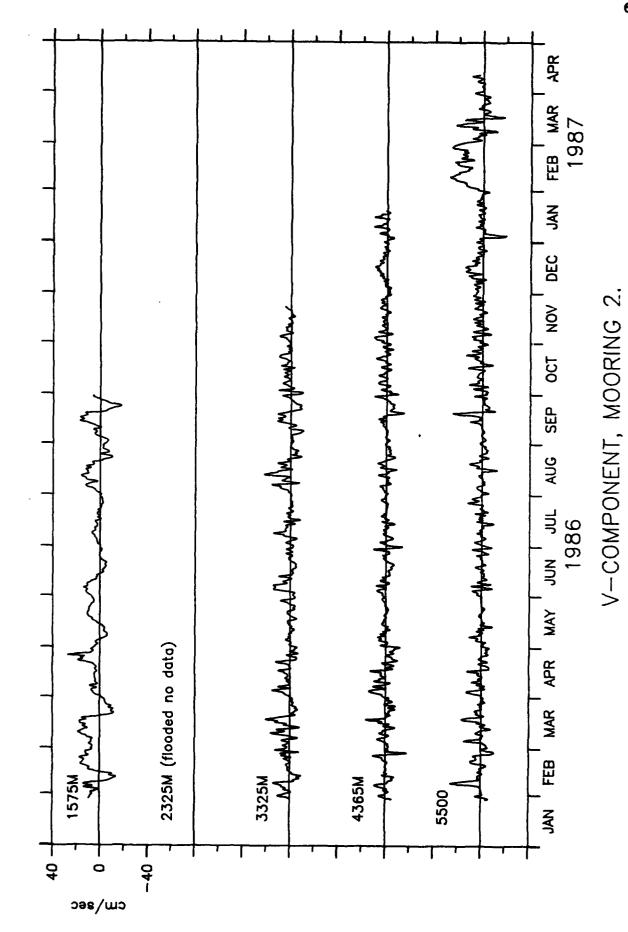
3325M AT MOORING 2.

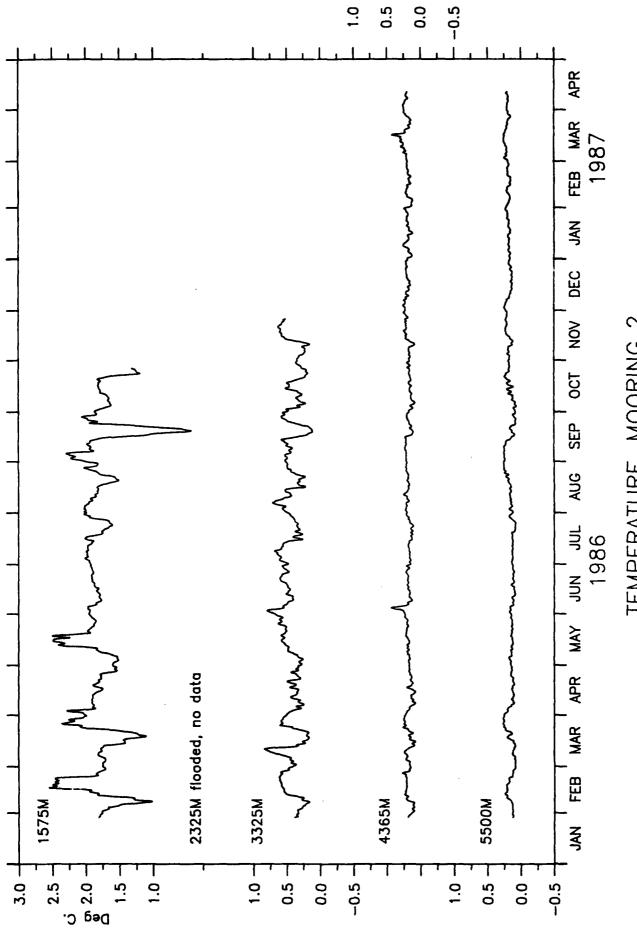




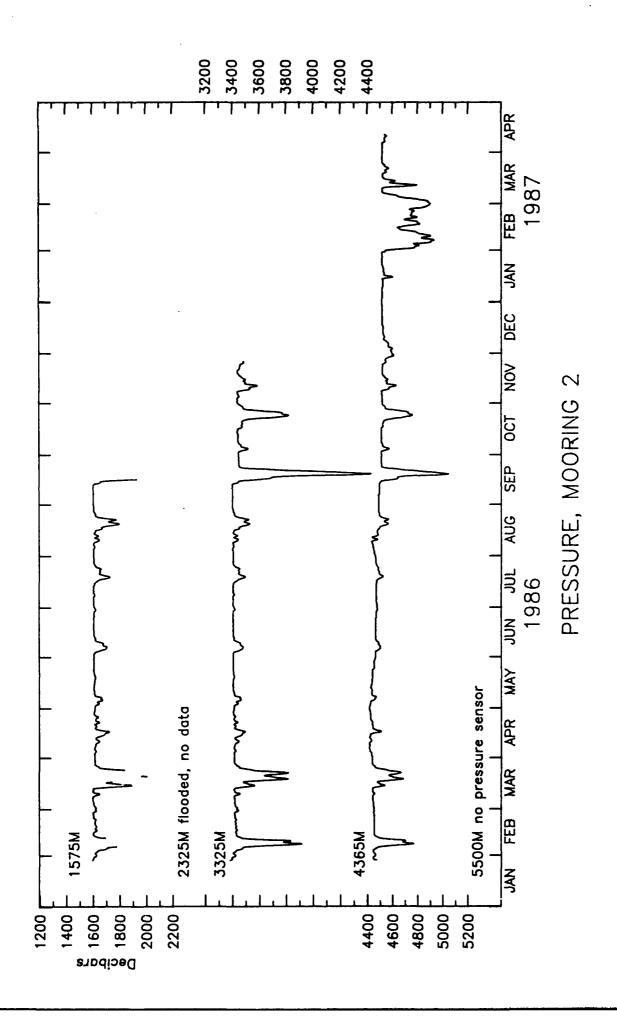






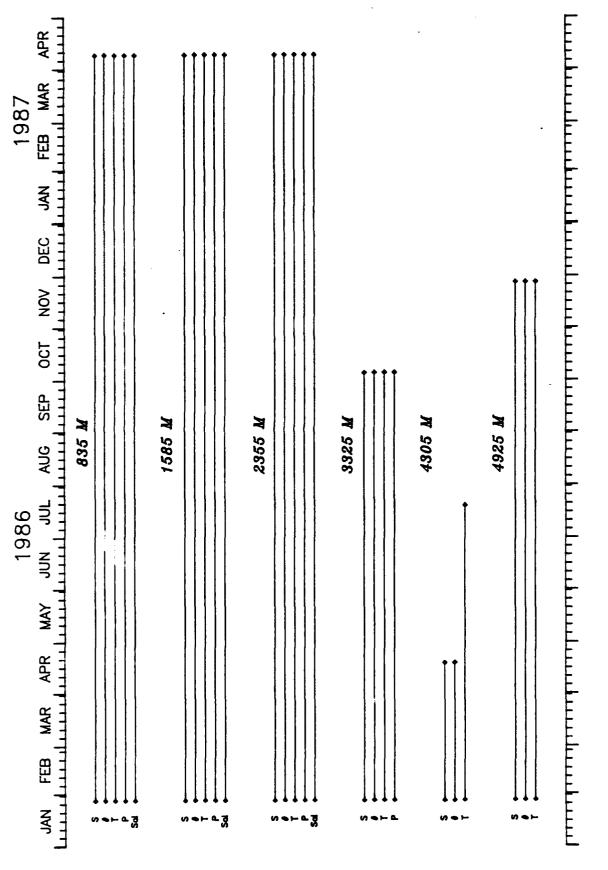


TEMPERATURE, MOORING 2.



MOORING 3

49°11.00'S, 41°12.99'W



DATA RETURN FROM MOORING 3.

MOORING 3. UNFILTERED HOURLY DATA

835M AT MOORING 3. 2200 27 JAN 86 - 1300 10 AP	₹ 87.	TAPE 7217/11.
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	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
s	19.87	10.44	0.80	55.10	10504	(1300	10 APR 87)
Ū	5.15	16.78	-44.60	50.10	10504		10 APR 87)
v	4.82	13.13	-39.30	47.90	10504		10 APR 87)
Ť	2.27	0.17	1.64	2.78	10504		10 APR 87)
P	906.97	101.34	841.10	1501.60	10504		10 APR 87)
F	900.97	101.34	041.10	1501.00	10304	(1300	IO AFR 07)
15	85M AT MOO	RING 3.	0100 28 J	AN 86 - 1	300 10 APR	87.	TAPE 4579/5.
s	14.88	7.81	0.80	43.90	10501	(1300	10 APR 87)
U	-0.49	12.37	-43.90	34.70	10501	(1300	10 APR 87)
V	4.61	10.39	-32.80	38.50	10501	(1300	10 APR 87)
T	1.93	0.33	1.11	2.79	10501	(1300	10 APR 87)
P	1662.77	86.66	1603.90	2217.70	10398	(1300	10 APR 87)
22	SEM AT MOC	NDING 2	2200 27 T	7N 06 _ 1	200 10 300	07 1	TAPE 4577/5.
23	SSM AI MOC	RING 3.	2300 27 3	AN 00 - 1	.300 IU APR	0/.	TAPE 45///5.
s	12.84	8.33	. 0.80	50.00	10503	(1300	10 APR 87)
U	-3.97	10.94	-45.10	32.20	10503	(1300	10 APR 87)
V	4.35	8.94		43.10	10503		10 APR 87)
T	1.25	0.24		2.06	10503		10 APR 87)
P	2442.15	88.44		2995.30	10503		10 APR 87)
			2000.00			(2000	20 11211 07,
33	25M AT MOC	RING 3.	0000 28 Ј	AN 86 -	1600 7 OCT	87.	TAPE 501/61.
S	11.80	7.68	0.70	44.60	6065	(1600	7 OCT 86)
U	-6.50	8.87		23.30	6065	(1600	
V	3.68	7.98	-23.60	30.50	6065	(1600	
T	0.47	0.12	0.13	0.82	6065		7 OCT 86)
P	3412.87	45.97		3773.00	6065	(1600	
_	• • • • • • • • • • • • • • • • • • • •					(2000	
43	05M AT MOC	PRING 3.	2300 27 J	AN 86 - 1	200 21 JUL	86. 7	TAPE 1536/25.
s	14.47	9.81	0.80	47.70	1979		20 APR 86)
U	-7.93	12.11	-40.50	17.90	1979		20 APR 86)
V	4.62	8.65	-20.60	39.00	1979		20 APR 86)
T	0.16	0.04	-0.01	0.27	4190	(1200	21 JUL 86)

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB.)

MOORING 3. UNFILTERED HOURLY DATA

4925M AT MOORING 3. 2300 27 JAN 86 - 0000 29 NOV 86. TAPE 1538/34.

	MEAN	SD	MIN	MAX	LENGTH	EMDS	AT
s	17.55	10.03	0.80	57.60	7322	(0000	29 NOV 86)
U	-10.80	10.96	-47.70	27.70	7322	•	29 NOV 86)
V	6.96	11.12	-25.20	49.70	7322	(0000	29 NOV 86)
T	0.12	0.06	-0.01	0.23	7322	(0000	29 NOV 86)

- (835 M) SPEED BRIDGED LINES: 3897 - 3915 (0600 9 JUL 86 - 0000 10 JUL 86)
- (1585 M) SPEED BRIDGED LINES:

 3989 3543 (1400 18 JUN 86 1500 24 JUN 86)

 PRESSURE OFFSCALE, GAPS IN LINES:

 8976 9044 (0000 6 FEB 87 2000 8 FEB 87)

 9773 9806 (0500 11 MAR 87 1400 12 MAR 87)
- (3325 M) RECORD TERMINATED EARLY, DATA OF EXTREMELY POOR QUALITY AFTER 7 OCT 86.
- (4305 M) BATTERY DEAD AT RECOVERY, RECORD TERMINATED EARLY.
- (4925 M) BATTERY DEAD AT RECOVERY, RECORD TERMINATED EARLY.

MOORING 3. LLP FILTERED 6-HOURLY DATA

835 M AT MOORING 3	0000 29 JAN 86 -	- 0600 9 APR 87.	TAPE 7217/11.
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	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
Ū	5.05	16.40	-39.23	43.19	1742	(0600	9 APR 87)
v	4.80	12.71	-36.44	35.39	1742		APR 87)
Ť	2.27	0.17	1.73	2.66	1742		P APR 87)
P	906.89	100.91	840.85	1433.45	1742		P APR 87)
Š	34.60	2.50	34.49	34.74	1742		APR 87)
5	34.00	2.30	24.43	34.74	1/42	(0000 :	APR 0/)
15	85M AT MOC	PRING 3.	0600 29 JA	N 86 - 120	0 9 APR 87	7. TAPE	4579/5.
U	-0.57	12.07	-32.18	31.73	1742	(1200 9	P APR 87)
V	4.58	10.06	-25.94	29.16	1742		P APR 87)
T	1.93	0.32	1.19	2.77	1742		P APR 87)
P	1658.96	77.99	1605.00	2128.72	1708		P APR 87)
S	34.74	3.75	34.68	34.87	1742		9 APR 87)
23	55M AT MOC	DTNC 3	0000 29 7	'AN 86 - 06	00 0 ADB 9	27 MADI	E 4577/5.
				W 99 - 00	OO 9 APR 0	o/. TAPI	2 45///5.
U	-4.03	10.64	-36.21	27.20	1742		9 APR 87)
V	4.33	8.60	-20.89	34.78	1742		9 APR 87)
T	1.25	0.24		1.96	1742	(0600	9 APR 87)
P	2442.12	88.16	2388.64	2924.23	1742	(0600 9	9 APR 87)
S	34.74	3.85	34.68	34.81	1738	(0600 9	9 APR 87)
33	25M AT MOC	PRING 3.	0000 29 J	AN 86 - 12	00 6 OCT 8	86. TAPI	E 501/61.
U	-6.53	8.51	-38.91	14.58	1003	(1200	6 OCT 86)
V	3.64	7.65	-18.22	22.90	1003		6 OCT 86)
T	0.47	0.12		0.77	1003		6 OCT 86)
P	3412.82	45.86	3375.40	3717.32	1003		6 OCT 86)
43	05M AT MOO					•	PE 1536/25.
			<u>.</u>				
U	-7.98			13.31	321		9 APR 86)
V	4.49	8.28	-12.98	34.48	321		9 APR 86)
T	0.16	0.04	0.03	0.23	690	(0600 20	0 JUL 86)

(Speed, u, and v are given in cm/sec, Temperature in $^{\circ}C$, Pressure in DB, and Corrected Salinity in ppt.)

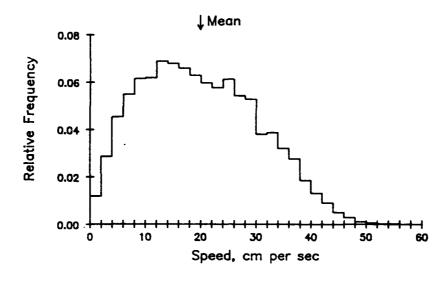
MOORING 3. LLP FILTERED 6-HOURLY DATA

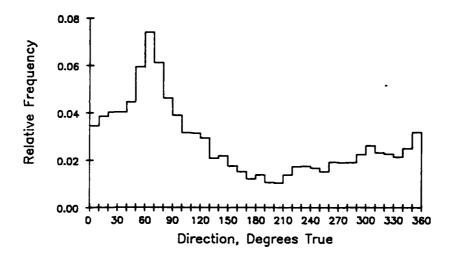
4925M AT MOORING 3. 0000 29 JAN 86 - 1800 27 NOV 86. TAPE 1538/34.

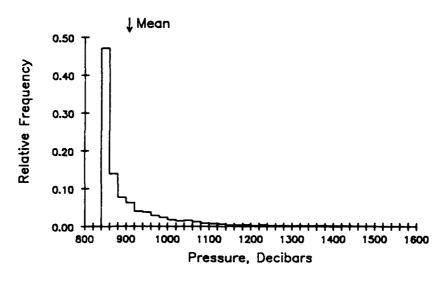
	MEAN	SD	MIN	MAX	LENGTH	ENDS AT
_	-10.79		-40.30	21.06		(1800 27 NOV 86)
V	6.94	10.65	-23.78	43.00	1212	(1800 27 NOV 86)
T	0.12	0.05	0.01	0.22	1212	(1800 27 NOV 86)

- (835 M) BRIDGES IN UNFILTERED SPEED RECORD
- (1585 M) BRIDGES IN UNFILTERED SPEED RECORD PRESSURE OFFSCALE, GAPS IN LLP RECORD, LINES: 1488 - 1507 (0000 5 FEB 87 - 1800 9 FEB 87) 1621 - 1634 (0600 10 MAR 87 - 1200 13 MAR 87)
- (2355 M) GAPS IN SALINITY RECORD, BAD VALUES REMOVED
- (3325 M) RECORD TERMINATED EARLY
 - (4305 M) RECORD TERMINATED EARLY, BATTERY DEAD AT RECOVERY
 - (4925 M) RECORD TERMINATED EARLY, BATTERY DEAD AT RECOVERY

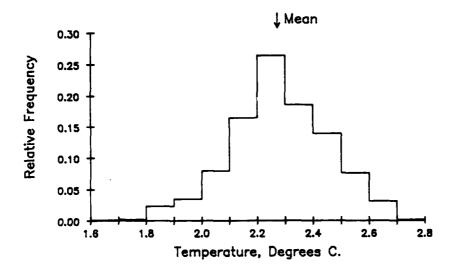
835 METERS AT MOORING 3. TAPE 7217/11.

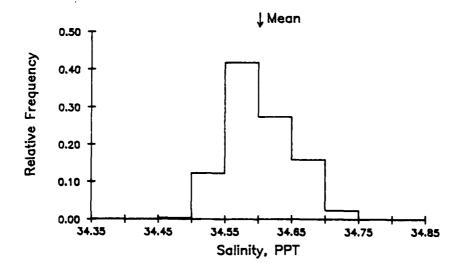




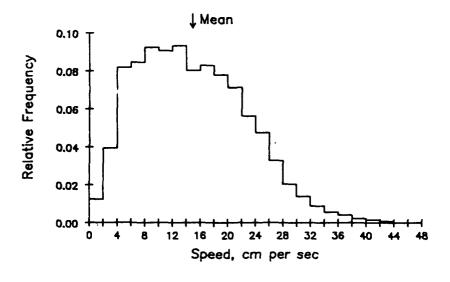


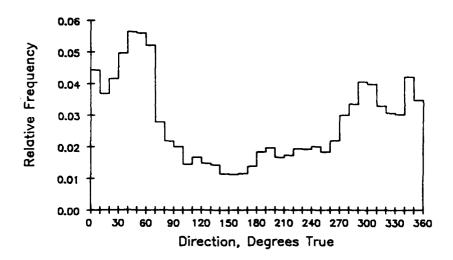
835 METERS AT MOORING 3. TAPE 7217/11.

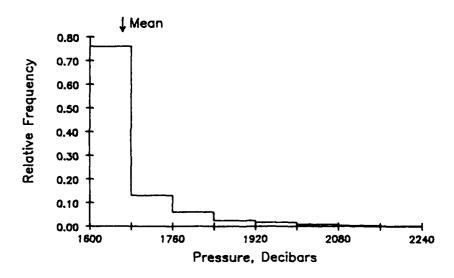




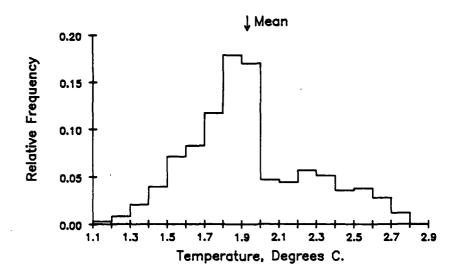
1585 METERS AT MOORING 3. TAPE 4579/5.

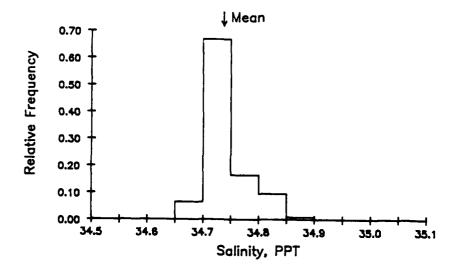




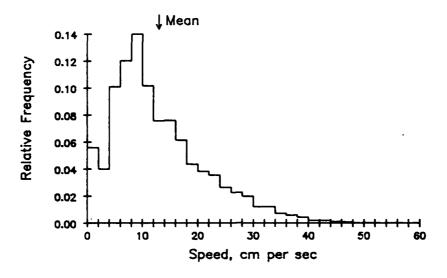


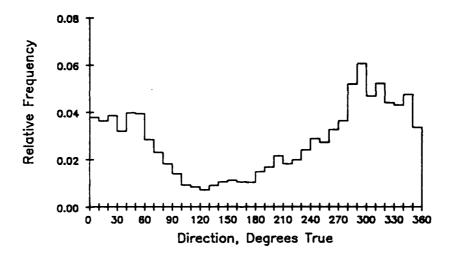
1585 METERS AT MOORING 3. TAPE 4579/5.

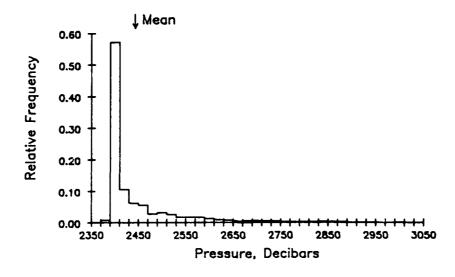




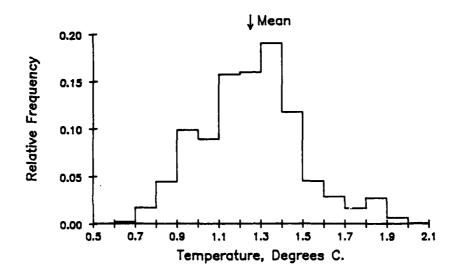
2355 METERS AT MOORING 3. TAPE 4577/5.

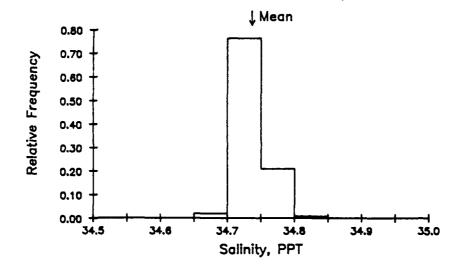




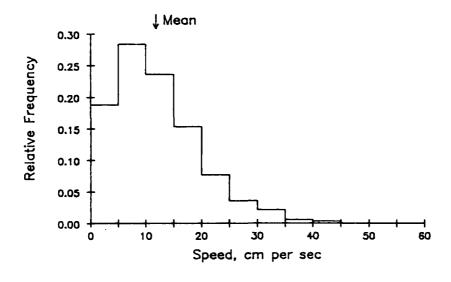


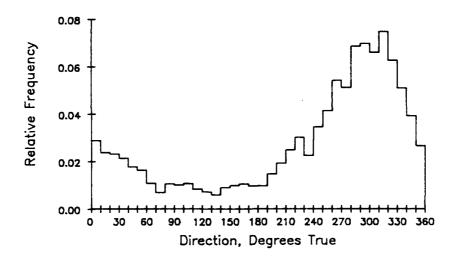
2355 METERS AT MOORING 3. TAPE 4577/5.

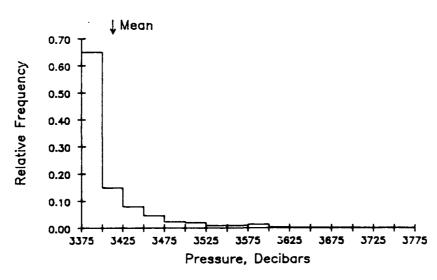




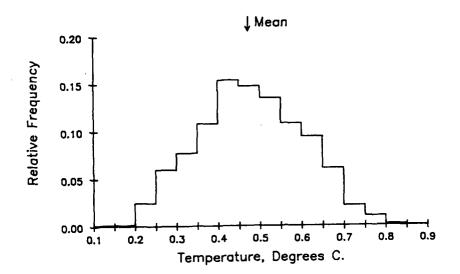
3325 METERS AT MOORING 3. TAPE 501/61.



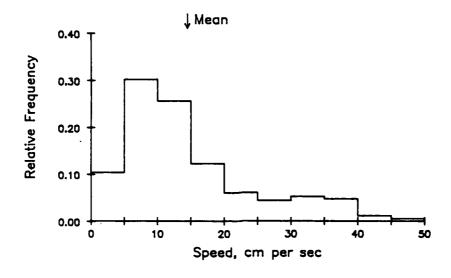


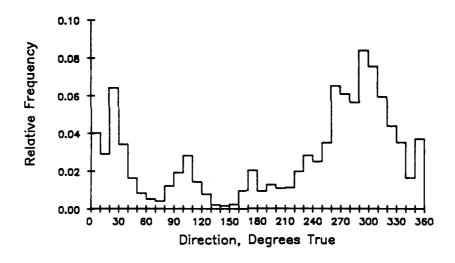


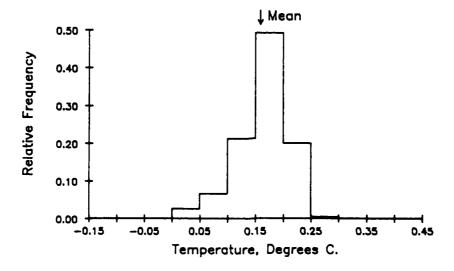
3325 METERS AT MOORING 3. TAPE 501/61.



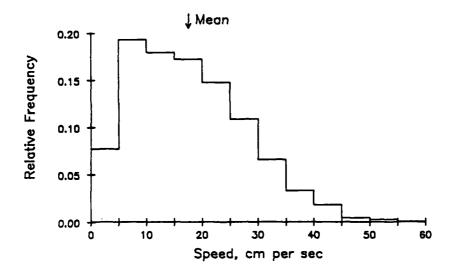
4305 METERS AT MOORING 3. TAPE 1536/25..

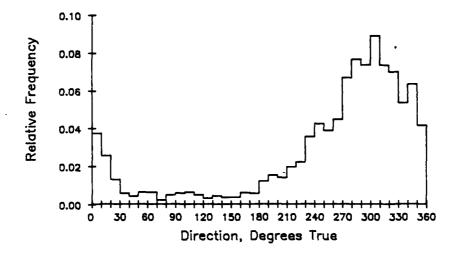


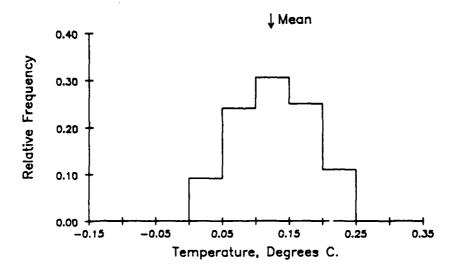




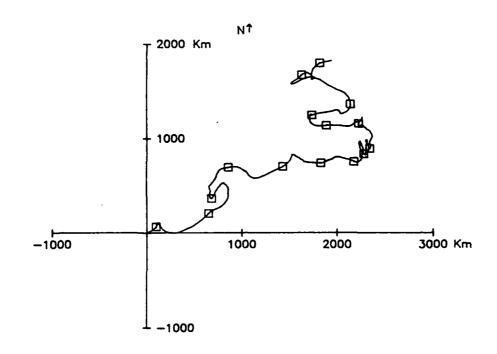
4925 METERS AT MOORING 3. TAPE 1538/34.

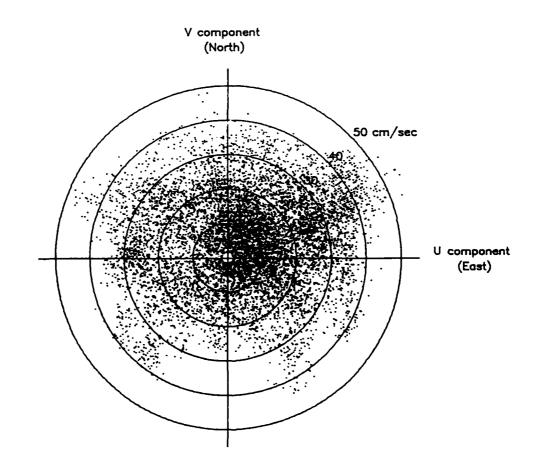




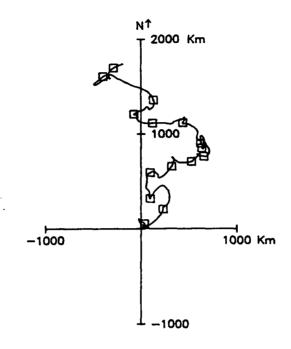


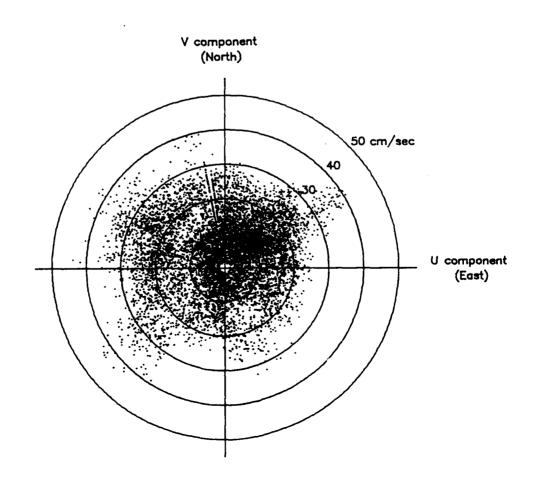
835M AT MOORING 3. 27 JAN 86 - 10 APR 87. TAPE 7217/11.



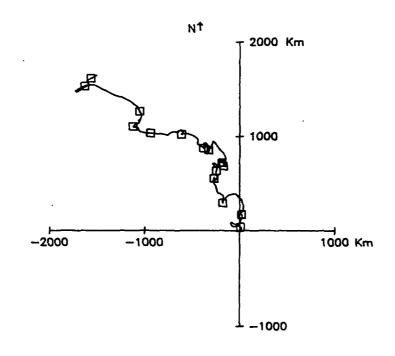


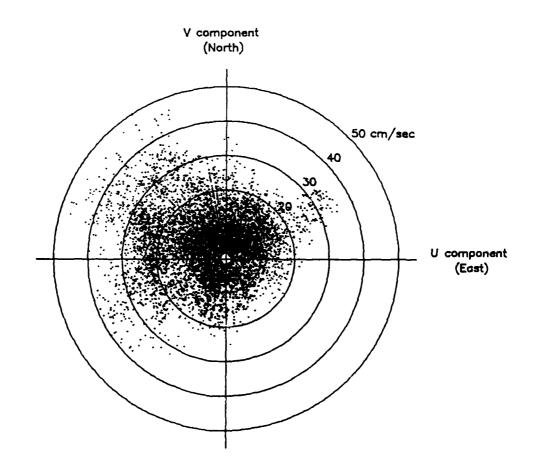
1585M AT MOORING 3. 28 JAN 86 - 10 APR 87. TAPE 4579/5.



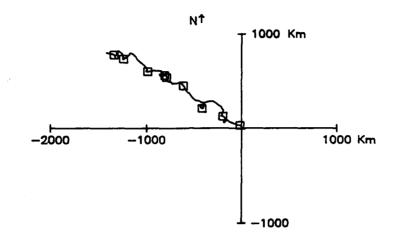


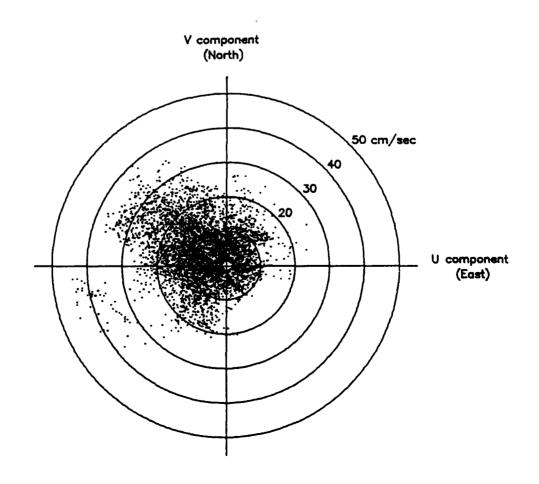
2355M AT MOORING 3. 27 JAN 86 - 10 APR 87. TAPE 4577/5.



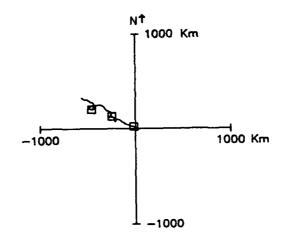


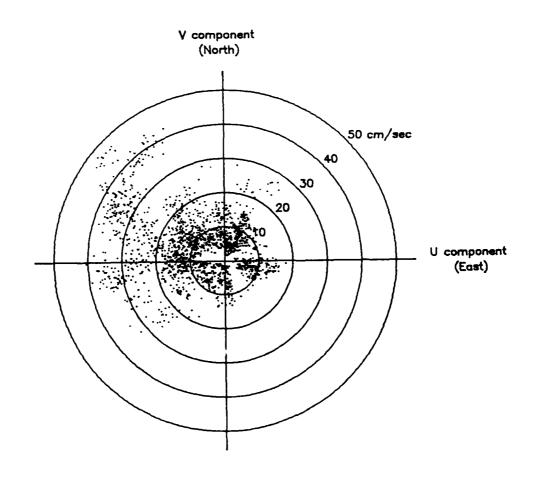
3325M AT MOORING 3. 28 JAN 86 - 7 OCT 87. TAPE 501/61.



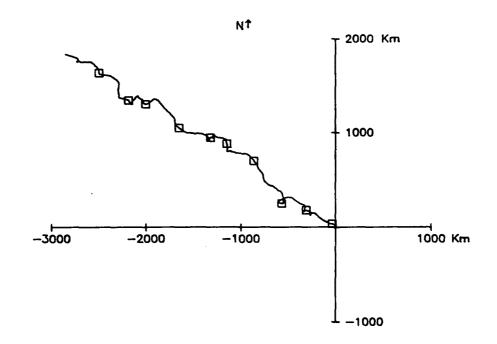


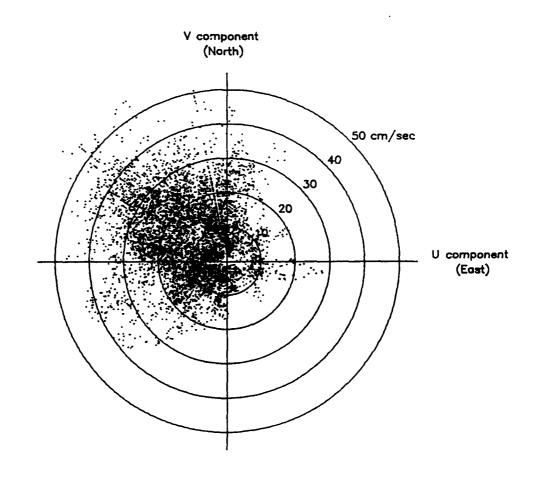
4305M AT MOORING 3. 27 JAN 86 - 20 APR 86. TAPE 1536/25.

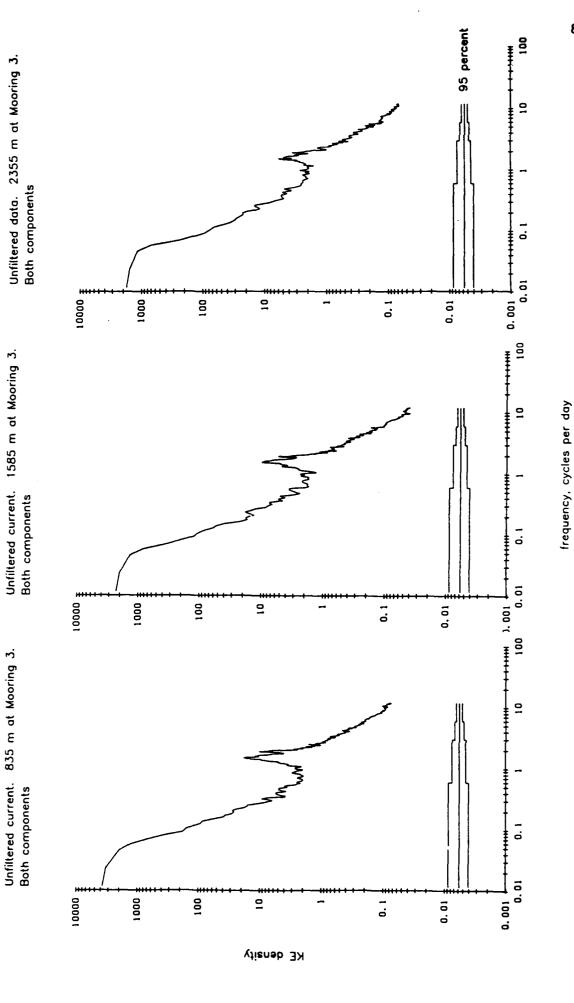




4925M AT MOORING 3. 27 JAN 86 - 29 NOV 86. TAPE 1538/34.

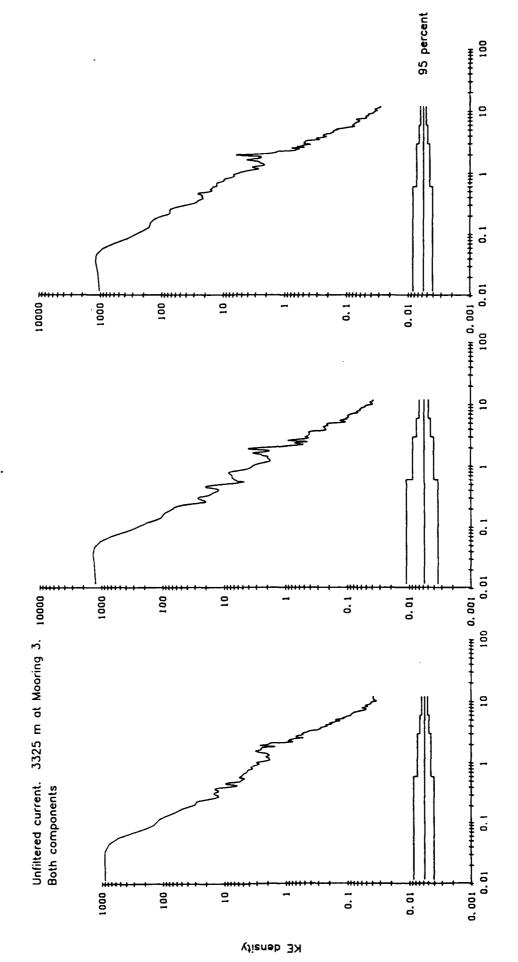




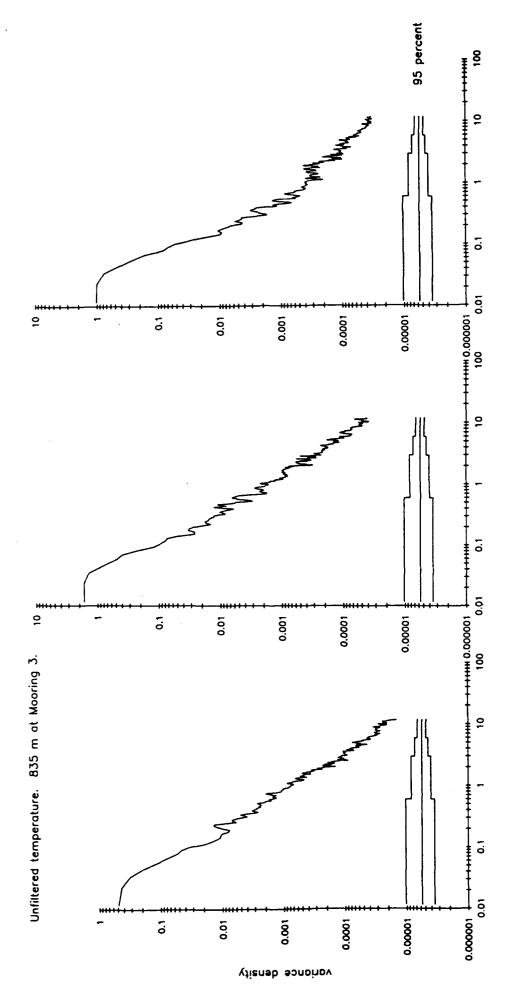


Unfiltered current. 4925 m at Mooring 3. Both components

Unfiltered current. 4305 m at Mooring 3. Both components



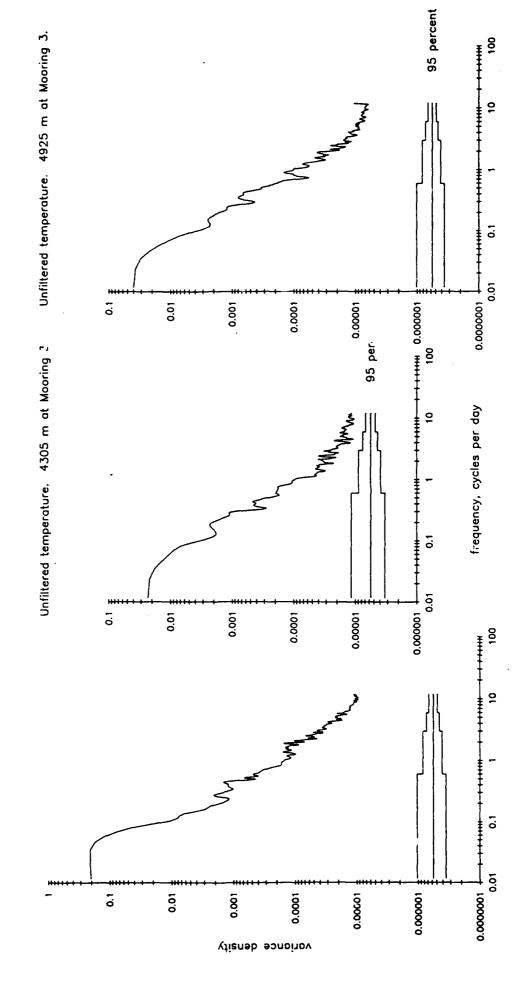
frequency, cycles per day



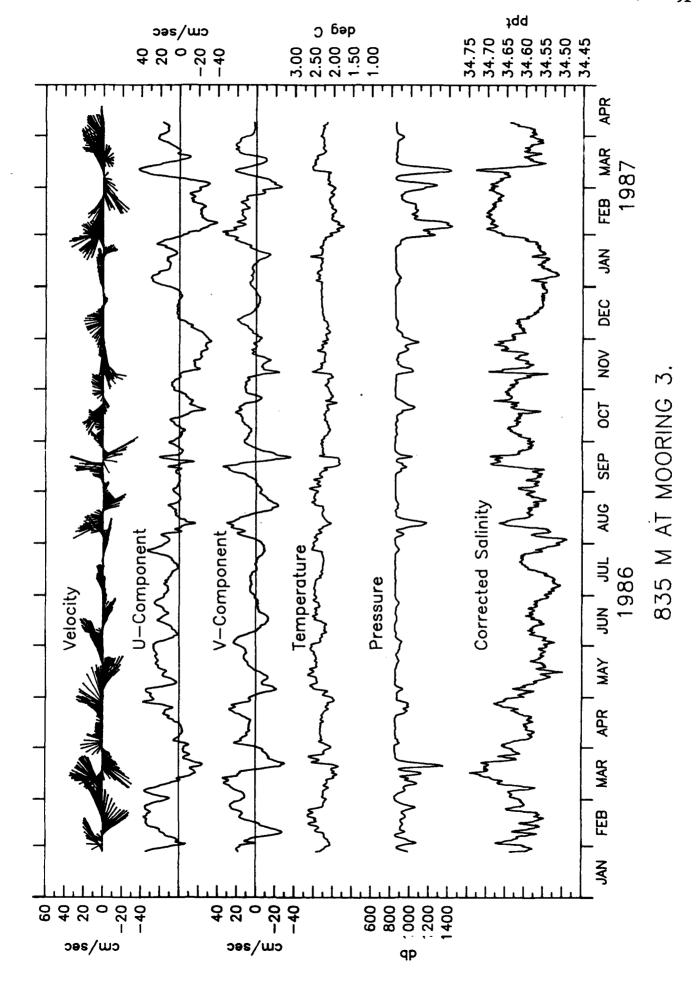
Unfiltered temperature. 2355 m at Mooring 3.

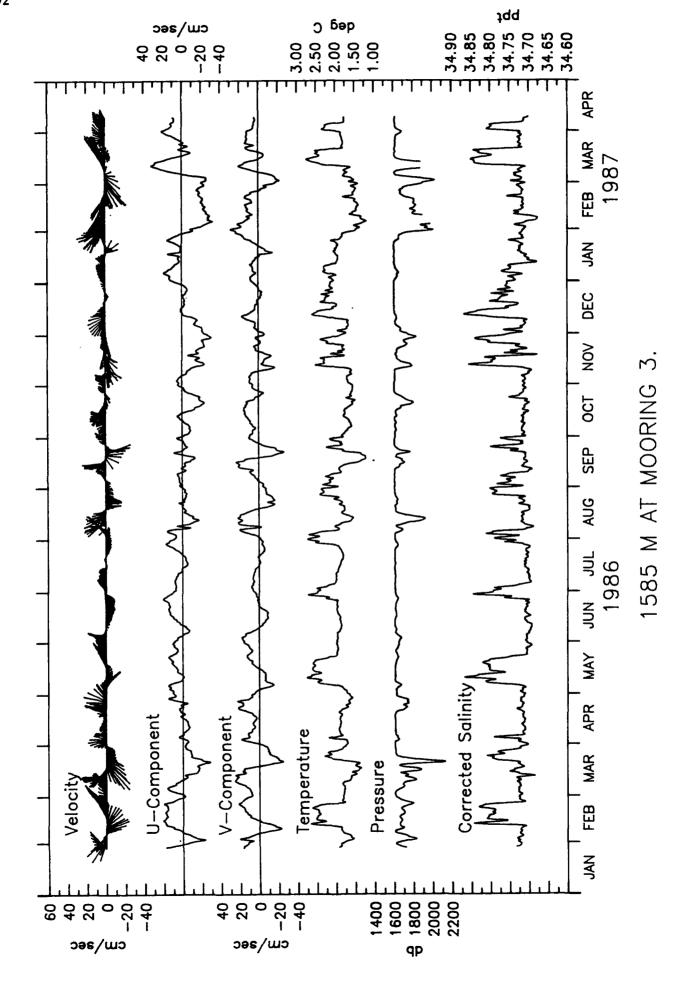
Unfiltered temperature. 1585 m at Mooring 3

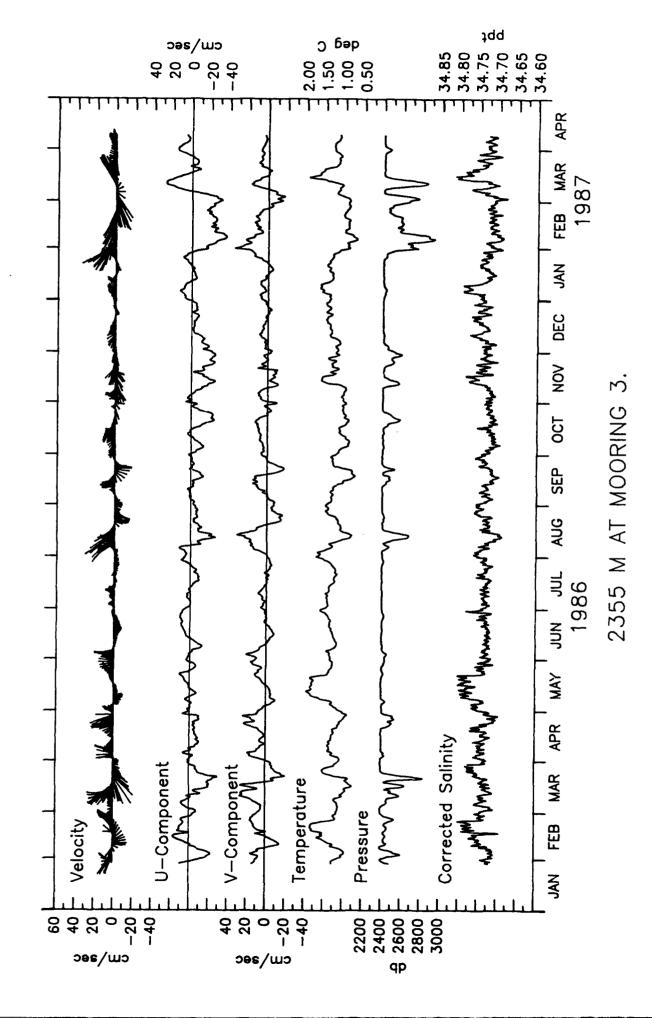
frequency, cycles per day

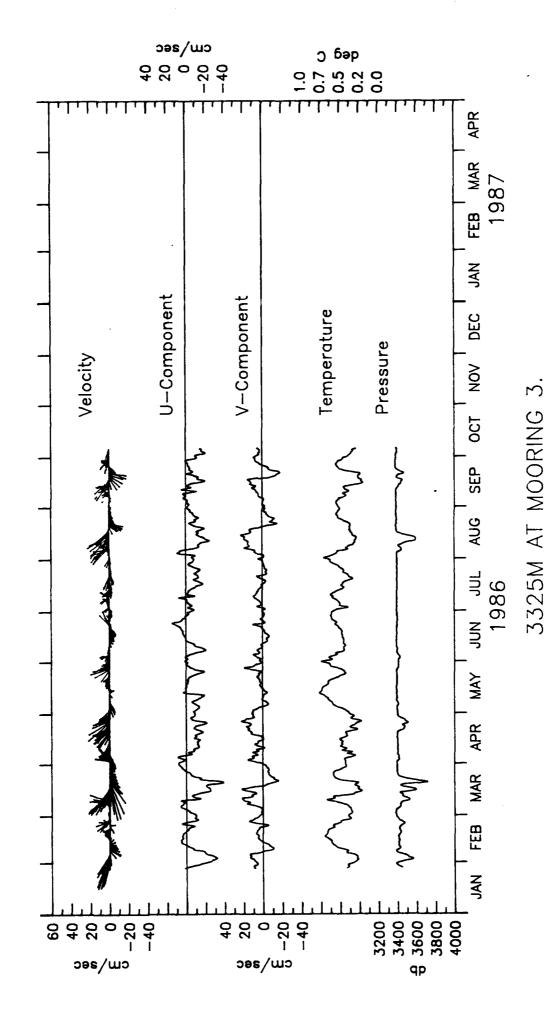


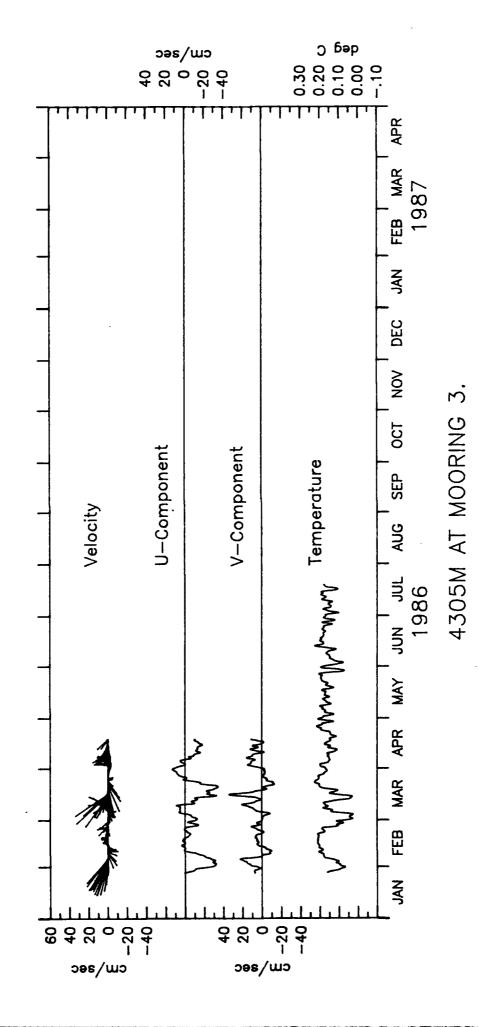
Unfiltered temperature. 3325 m at Mooring 3.

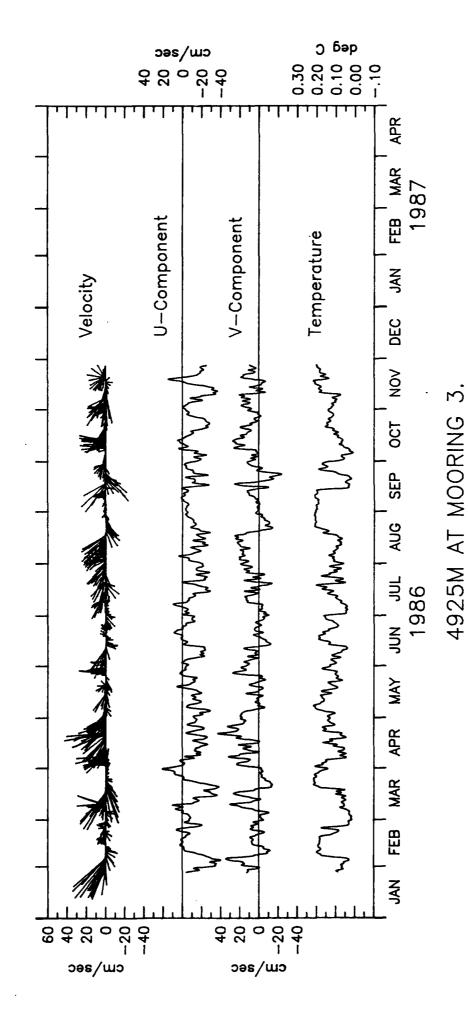


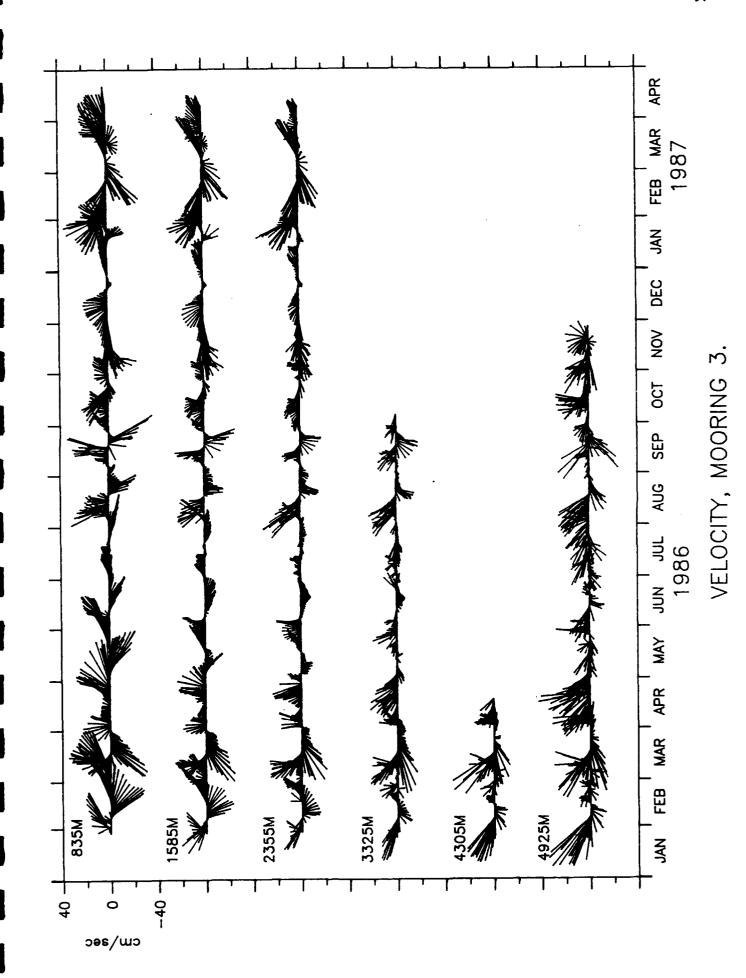


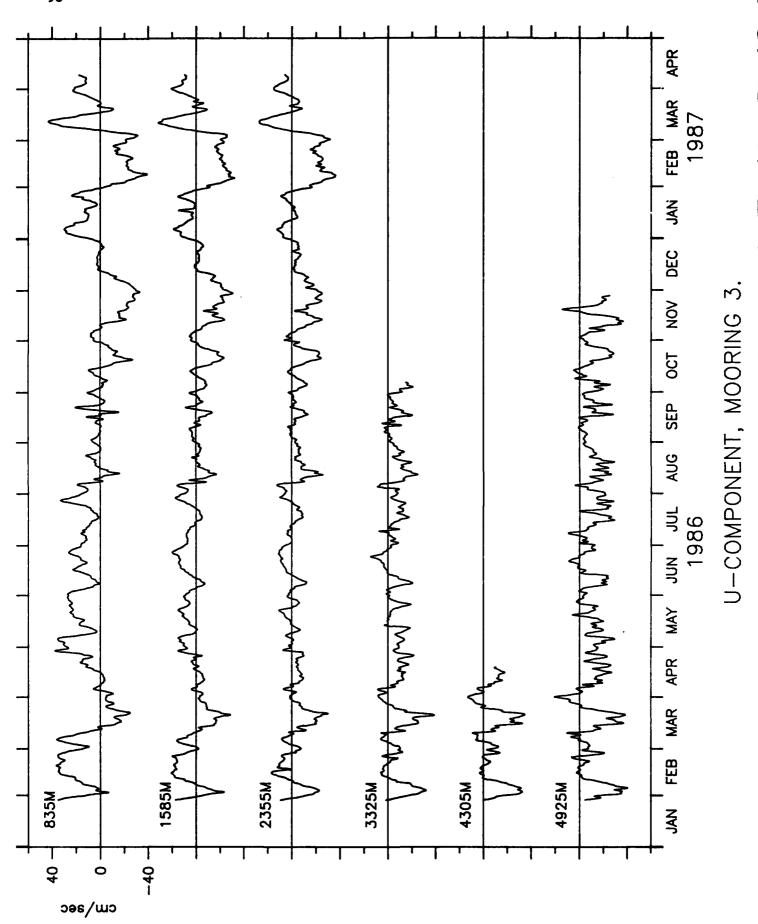


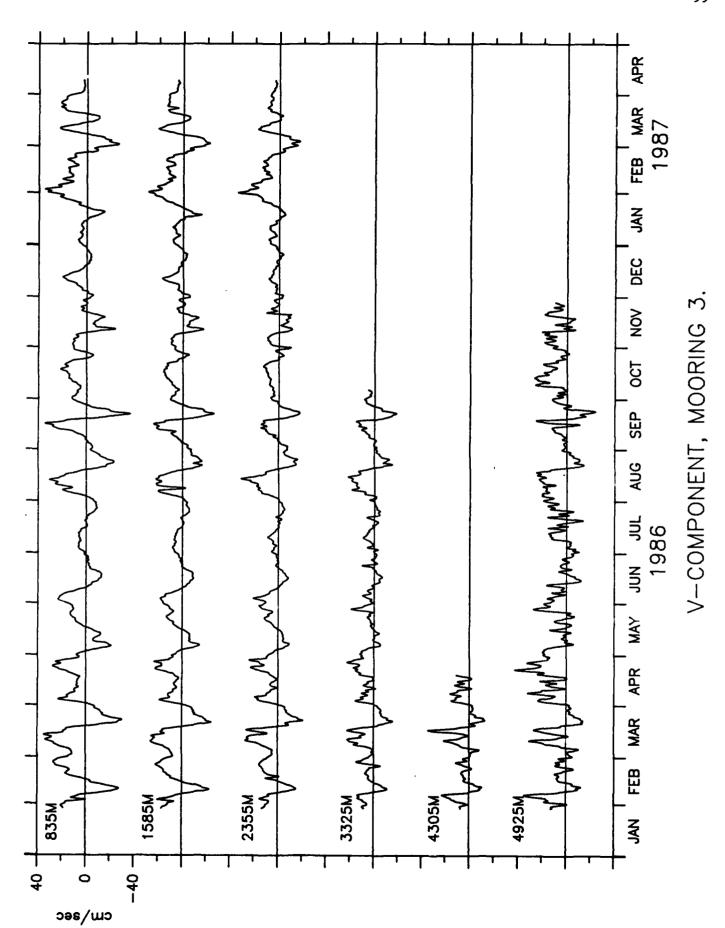


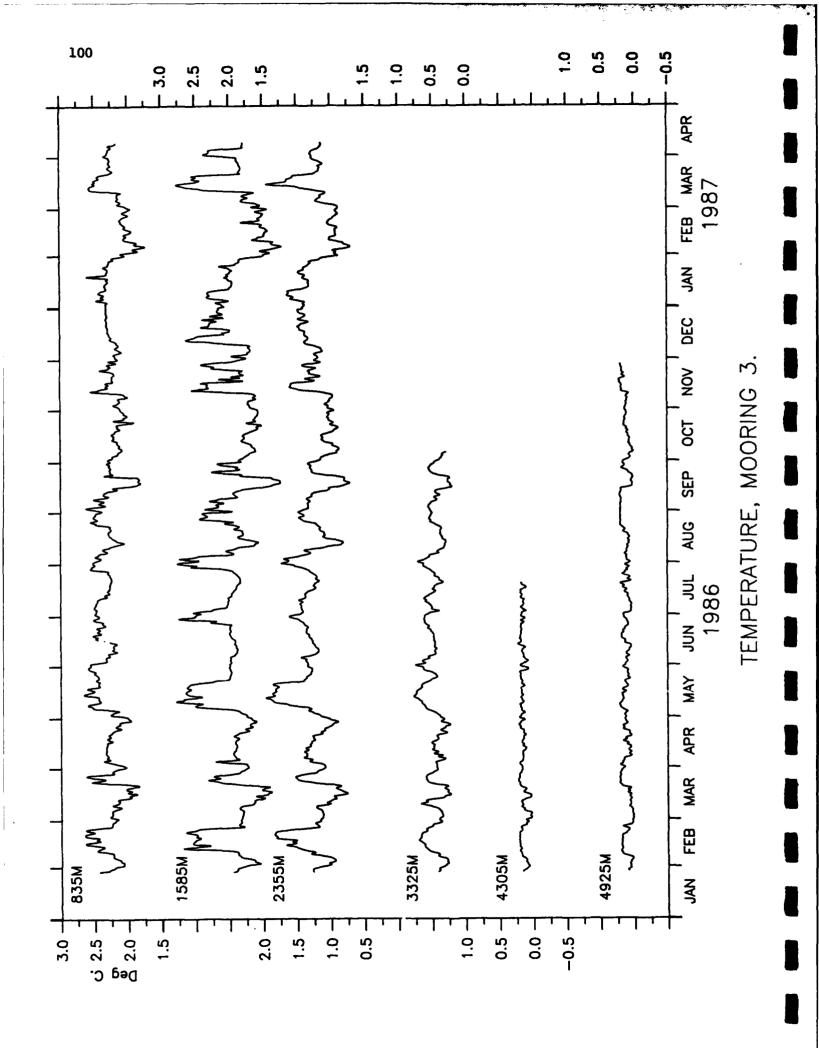


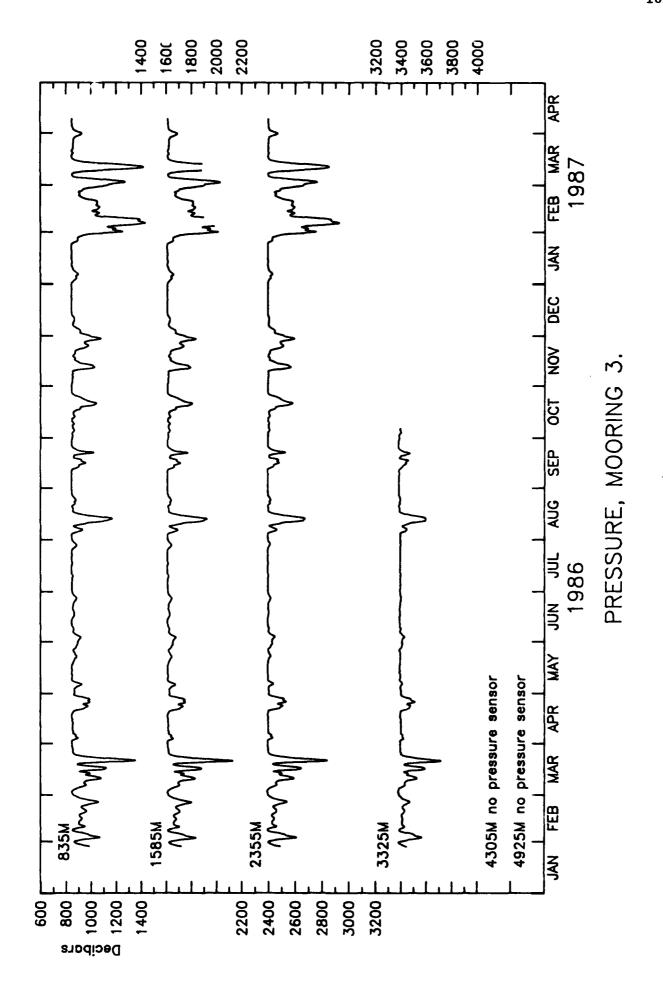


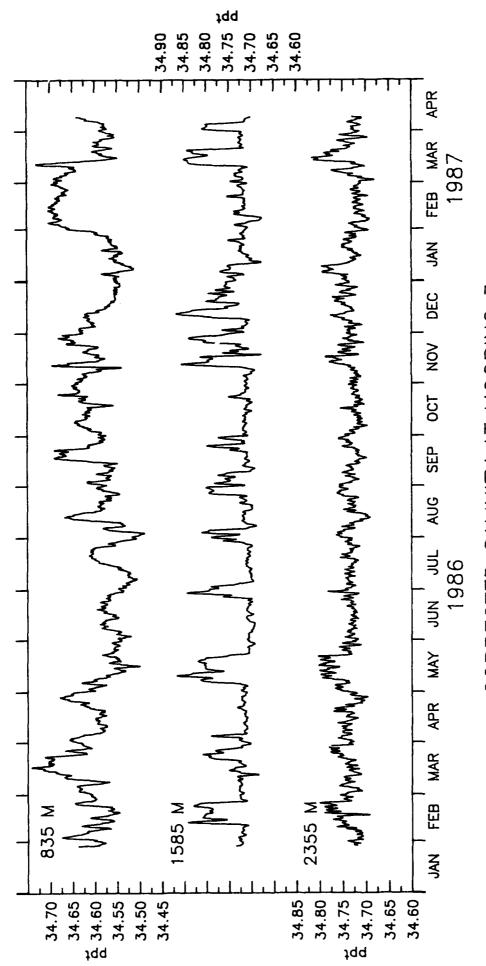








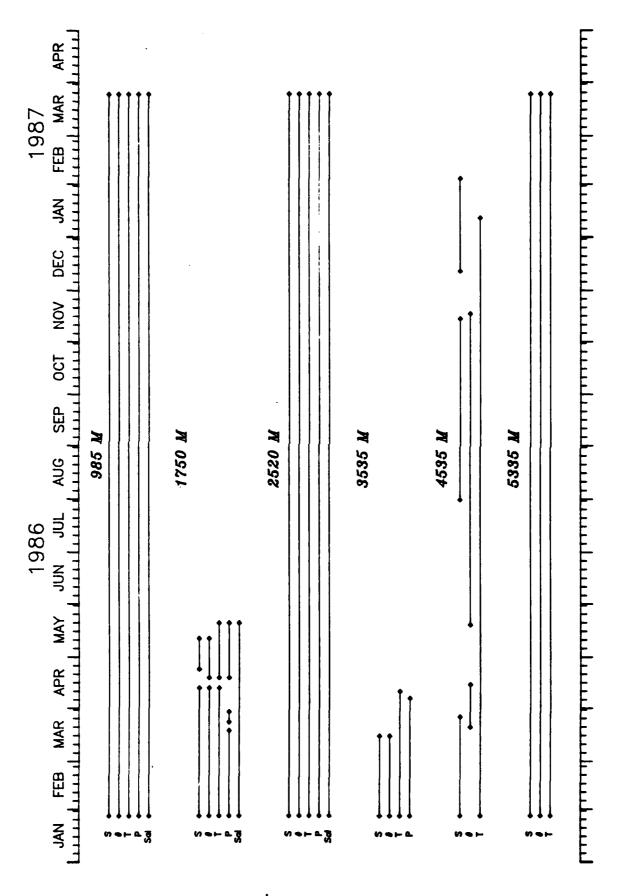




CORRECTED SALINITY AT MOORING 3.

MOORING 4

48°50.00'S, 41°10.25'W



DATA RETURN FROM MOORING 4.

MOORING 4 . UNFILTERED HOURLY DATA

985M AT MOORING 4.	0600 28 JAN 86 ·	- 1300 27 MAR 87.	TAPE 3123/38.
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							·
	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
s	24.87	10.70	0.80	54.00	10160	(1300 2	7 MAR 87)
Ü	17.94	13.03	-18.70				7 MAR 87)
	17.94	13.03	-10.70	46.00	10100		7 MAR 87)
V	-1.15	15.50					
${f T}$	2.37	0.26	0.71	2.90	10160		27 MAR 87)
P	1174.83	189.08	992.90	2144.90	10133	(1300 2	27 MAR 87)
17	50M AT MOC	RING 4.	0700 28 J	AN 86 - 2	300 24 MA	Y 86. I	TAPE 4582/6.
S	17.06	8.48	0.80	41.40	2400	(2300 1	L9 MAY 86)
U	7.69	10.29	-22.20	31.70	2400	(2300 1	L9 MAY 86)
V	-0.64			38.10	2400	(2300 1	L9 MAY 86)
Ť	2.18	0.40	1.02	38.10 2.77	2742		24 MAY 86)
	1874.38	0.40	1774.80		2529		24 MAY 86)
P	18/4.38	84.52	1//4.80	2140.40	2529	(2300 2	24 MAI 00)
25	20M AT MOC	RING 4.	0600 28 J	AN 86 - 1	.300 27 MA	R 87. 7	TAPE 7162/12.
s	13.84	8.18	0.80	48.10	10160	(1300 3	27 MAR 87)
Ü	5.35	0.10	-43.00	44.00	10160		27 MAR 87)
	5.55	9.37	-42.50	44.00	10160		27 MAR 87)
V							
T	1.37	0.33		2.19			27 MAR 87)
P	2676.81	145.95	2556.10	3489.00	10135	(1300 2	27 MAR 87)
35	35M AT MOO	ORING 4.	0600 28 J	'AN 86 - C	0000 12 AP	R 86.	TAPE 503/59.
_							
S			0.70				17 MAR 86)
U	-5.80	5.06	-21.00	9.20	1169		17 MAR 86)
V	2.03	6.74	-16.20	23.40	1169	(2200	17 MAR 86)
T	0.60	0.19	0.26	23.40 0.96	1169 1771	(0000	12 APR 86)
P		09 97	3593 00	4086.00	1702		9 APR 86)
-	30/9.4/	30.07	3333.00	4000.00	1702	(0200) III (00)
45	335M AT MOO	ORING 4.	0600 28 J	AN 86 - 1	1200 5 FEB	87. T	APE 1534/34.
s	12.33	7.73	0.80	45.00	5218	(0200	5 FEB 87)
Ū	-3.70	7.62	0.80 -33.90 -31.60	19.00	2701		18 NOV 86)
V	1.68	12 45	-31 60	44 60	2701		18 NOV 86)
v T		12.45	-21.00	44.00	2/01		13 JAN 86)
T	0.19	0.04	0.02	0.46	8407	(1200	TO NWW DO)

⁽Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB.)

MOORING 4 . UNFILTERED HOURLY DATA

```
5335M AT MOORING 4.
                     0600 28 JAN 86 - 1300 27 MAR 87. TAPE 4418/25.
S
     11.36
               8.58
                          0.80
                                  50.50
                                         10160
                                                   (1300 27 MAR 87)
                                                   (1300 27 MAR 87)
U
      0.39
               9.94
                        -37.20
                                  39.20
                                         10160
                                                   (1300 27 MAR 87)
V
      4.20
               9.27
                        -39.70
                                  35.70
                                         10160
T
                                  0.25
                                                   (1300 27 MAR 87)
      0.18
               0.04
                         0.02
                                         10160
( 955 M) BRIDGES IN SPEED RECORD, LINES:
                1335 - 1368 (2000 24 MAR 86 - 0500 26 MAR 86)
                2470 - 2483 (0300 11 MAY 86 - 1600 11 MAY 86)
```

5249 - 5396 (2200 3 SEP 86 - 0100 10 SEP 86)
PRESSURE OFFSCALE, SET TO ZERO LINES:
6631 - 6657 (1200 31 OCT 86 - 1400 1 NOV 86)

(1750 M) GAPS IN RECORD, LINES: (METER FLOODED)
SPEED 1799 - 2079 (0500 13 APR 86 - 2100 24 APR 86)
DIRECTION 1800 - 1877 (0600 13 APR 86 - 1100 16 APR 86)

TEMPERATURE 1810 - 1868 (1600 13 APR 86 - 0200 16 APR 86)

GAPS IN PRESSURE RECORD, (OFFSCALE) LINES:

1283 - 1311 (1700 22 MAR 86 - 2100 23 MAR 86)

1528 - 1698 (2200 1 APR 86 - 0000 9 APR 86)

1807 - 1868 (1300 13 APR 86 - 0200 16 APR 86)

1994 - 2003 (0800 21 APR 86 - 1700 21 APR 86)

(2520 M) PRESSURE OFFSCALE, GAPS LINES: 6631 - 6655 (1200 31 OCT 86 - 1200 1 NOV 86)

(3535 M) DATA IN ALL CHANNELS OF POOR QUALITY, RECORD TERMINATED EARLY.

(4535 M) DATA IN ALL CHANNELS OF POOR QUALITY, RECORD TERMINATED EARLY. GAPS IN RECORDS LINES:

SPEED 1407 - 4460 (2000 27 MAR 86 - 0100 2 AUG 86) 6987 - 7673 (0800 15 NOV 86 - 2200 13 DEC 86) DIRECTION 1 - 1231 (0600 28 JAN 86 - 1200 20 MAR 86) 1849 - 2702 (0600 15 APR 86 - 1900 20 MAY 86)

MOORING 4. LLP FILTERED 6-HOURLY DATA

985M AT MOORING 4. 0600 29 JAN 86 - 1200 26 MAR 87. T	4		0600	29	JAN	86	-	1200	26	MAR	87.	TAPE 3123/38.
---	---	--	------	----	-----	----	---	------	----	-----	-----	---------------

	MEAN	SI	D MIN	MAX	LENGTH	ENDS	AT		
Ū	17.91	12.62	-12.41	48.96	1686	(1200	26 MAR 87)		
v	-1.24	15.07	-37.42	42.12	1686		26 MAR 87)		
${f T}$	2.37	0.25	1.00	2.79	1686	(1200	26 MAR 87)		
P	1170.64	181.79	1013.34	1917.07	1673	(1200	26 MAR 87) 26 MAR 87)		
	34.76	3.31	34.56	34.90	1667	(1200	26 MAR 87)		
					200.	12200	20 124 07,		
17	50M AT MOO	RING 4.	1200 29 3	JAN 86 - 1	800- 23 M	AY 86.	TAPE 4582/6.		
U	7.63	10.03	-13.58	26.82	383	(1800	18 MAV 86)		
V	-0.98	13.89	-29.49	35.27	383	(1800	18 MAY 86) 18 MAY 86)		
T	2.18	0.39	1.03	2.67	440	(1800	23 MAY 86)		
P	1861.89	73.11	1774.66	2065.12	371	(1800	23 MAV 86)		
s	34.76	2.03	34.68	34.85	432	(1800	23 MAY 86) 23 MAY 86) 23 MAY 86)		
		2000			1,02	(1000	23 1411 00)		
2520M AT MOORING 4. 0600 29 JAN 86 - 1200 26 MAR 87. TAPE 7162/12.									
25	20M AT MOO	RING 4.	0600 29 3	TAN 86 - 1	200 26 MAI	R 87.	TAPE 7162/12.		
U	5.35	9.02	-41.47	39.73	1686	(1200	26 MAR 871		
V	-0.74	11.57	-32.15	40.92	1686	(1200	26 MAR 87) 26 MAR 87) 26 MAR 87) 26 MAR 87) 26 MAR 87)		
T	1.37	0.33	0.63	2.13	1686	(1200	26 MAD 87)		
P	2673.27	139.32	2555.89	3281.64	1673	(1200	26 MAD 87)		
S	34.74	2.73	34.67	34.81	1529	(1200	26 MAD 971		
			0.007	21102	1323	(1200	20 1211 07)		
	•								
35	35M AT MOO	RING 4.	0600 29 J	MAN 86 - 0	000 11 API	R 86.	TAPE 503/59.		
U	- 5.79	4.45	-17.51	4.74	187	(0000	11 APR 86)		
V	1.91	6.50	-11.59	20.96	187	(1800	16 MAR 86)		
T	0.60	0.19	0.27	0.92	288	(1800	16 MAR 86)		
P	3677.56	98.12	3597.58	4079.81	276	(0000)	11 APR 86)		
				10/2/02	2.0	(0000	11 MR 00)		
453	5M አጥ MOOD	TNC 4	0600 20 77	W 06 - 12	00 10 733	07 6	TAPE 1534/34.		
733	om al mook	ING 4.	0600 29 04	W 80 - 12	OO IZ JAN	87.	TAPE 1534/34.		
U	- 3.78	7.26	-24.02	9.55	434	(0600	14 NOV 86)		
V	2.13		-23.49				14 NOV 86)		
T	0.19	0.03		0.28			12 JAN 87)		
				7.20		(20 0121 01,		
53	35M AT MOO	RING 4.	0600 29 J	TAN 86 - 1	200 26 MAI	R 87.	TAPE 4418/25.		
U	0.45	9.38	-28.25	30.56	1686	(1200	26 MAR 87)		
v	4.13	8.84		28.10	1686		26 MAR 87)		
Ť	0.18	0.04	0.02	0.24			26 MAR 87)		
_		2.03	0.02	V+24	1000	(1200	EU HAR O/)		

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

MOORING 4. LLP FILTERED 6-HOURLY DATA

(985 M) BRIDGES IN UNFILTERED SPEED RECORD
PRESSURE OFFSCALE, GAPS IN RECORD LINES:
1098 - 1110 (1800 30 OCT 86 - 1200 2 NOV 86)
GAPS IN SALINITY RECORD. BAD, OFFSCALE SALINITY POINTS
REMOVED.

(1750 M) METER FLOODED, SHORT RECORD
OFFSCALE AND BAD VALUES SET REMOVED BEFORE FILTERING,
GAPS IN LINES:

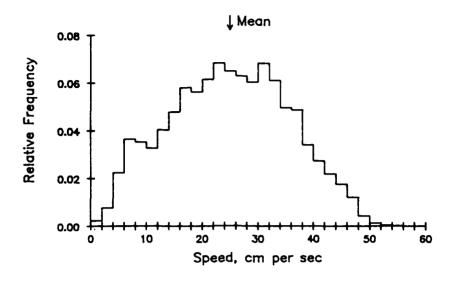
U, V 292 - 346 (0600 12 APR 86 - 1800 25 APR 86)
TEMPERATURE 294 - 311 (1800 12 APR 86 - 0000 17 APR 86)
PRESSURE 206 - 218 (1800 21 MAR 86 - 1800 24 MAR 86)
247 - 311 (0000 1 APR 86 - 0000 17 APR 86)
325 - 333 (1200 20 APR 86 - 1200 22 APR 86)
GAPS IN SALINITY RECORD, BAD VALUES REMOVED

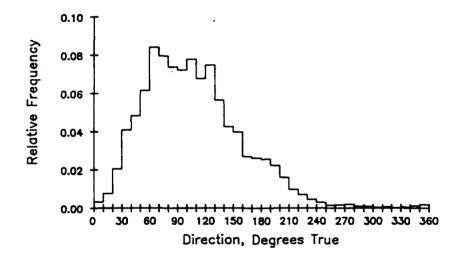
- (2520 M) PRESSURE OFFSCALE, GAPS IN THE FOLLOWING LINES:

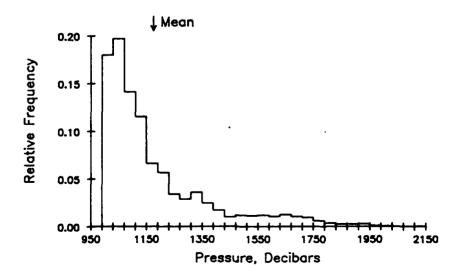
 1098 1110 (1200 30 OCT 86 0600 2 NOV 86)

 GAPS IN SALINITY RECORD. BAD, OFFSCALE SALINITY POINTS
- (3535 M) DATA IN ALL CHANNELS OF POOR QUALITY, RECORD TERMINATED EARLY.
- (4535 M) DATA IN ALL CHANNELS OF POOR QUALITY, RECORD TERMINATED EARLY. GAPS IN SPEED, & DIRECTION IN UNFILTERED RECORD, LLP GAPS, LINES IN U & V:

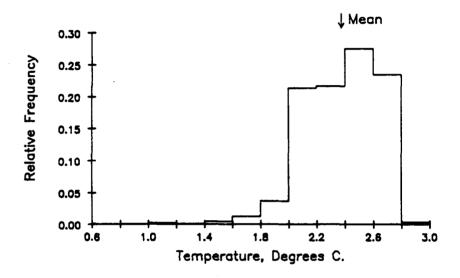
1 - 206 (0600 29 JAN 86 - 1200 21 MAR 86) 228 - 744 (0000 27 MAR 86 - 0000 3 AUG 86) 1158 - 1395 (1200 14 NOV 86 - 1200 12 JAN 87) 985 METERS AT MOORING 4. TAPE 3123/38.

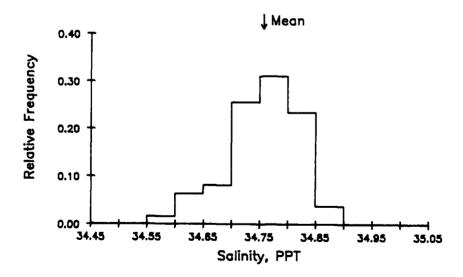


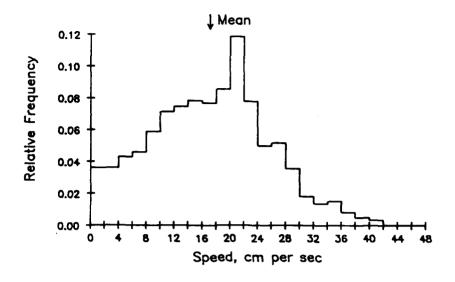


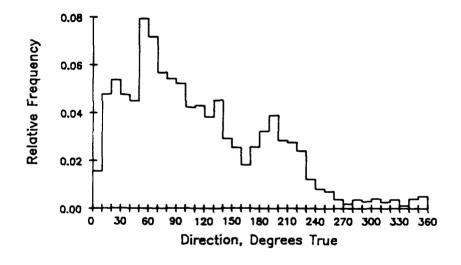


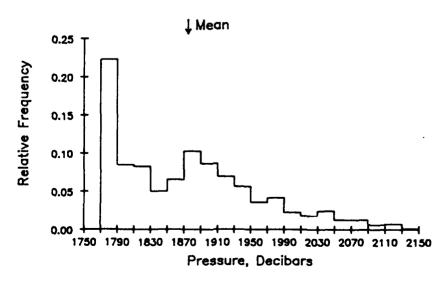
985 METERS AT MOORING 4. TAPE 3123/38.



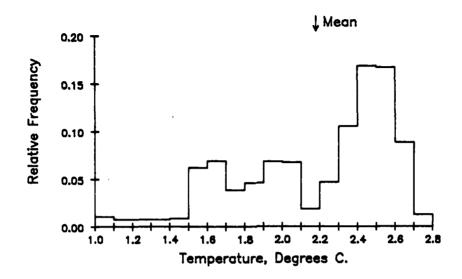


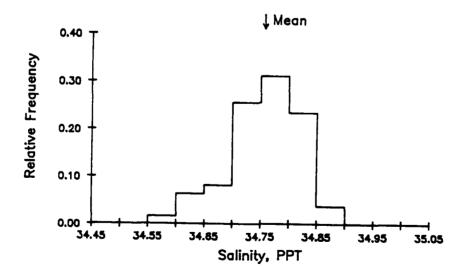




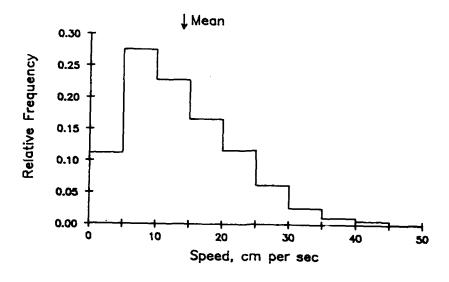


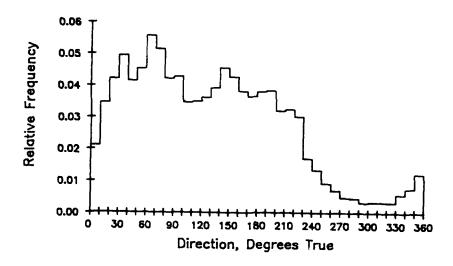
1750 METERS AT MOORING 4. TAPE 4582/6.

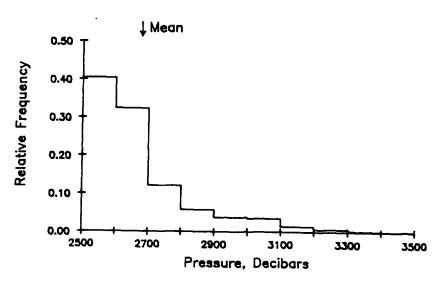




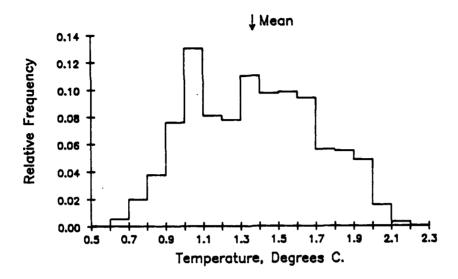
2520 METERS AT MOORING 4. TAPE 7162/12.

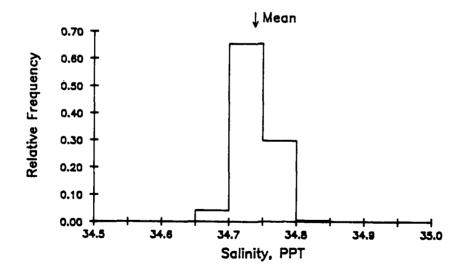




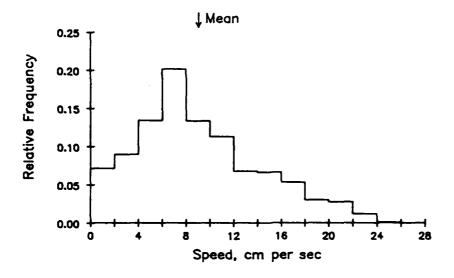


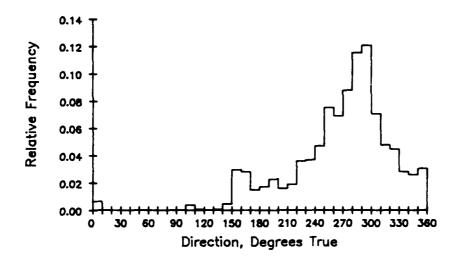
2520 METERS AT MOORING 4. TAPE 7162/12.

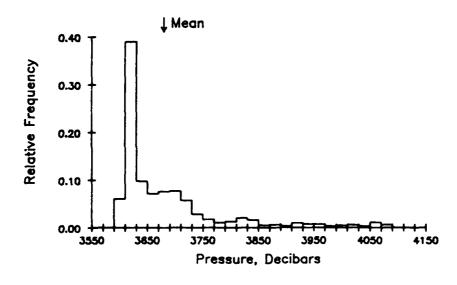




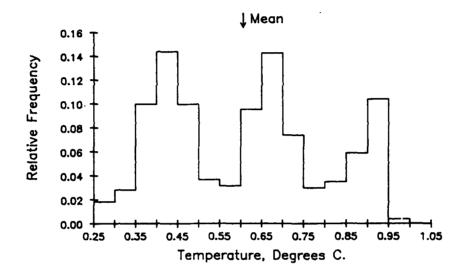
3535 METERS AT MOORING 4. TAPE 503/59.



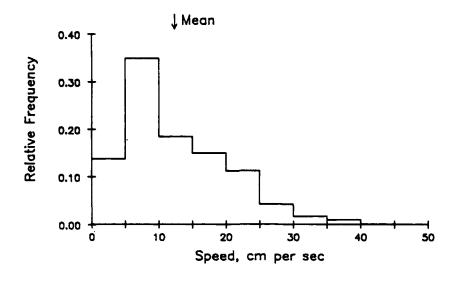


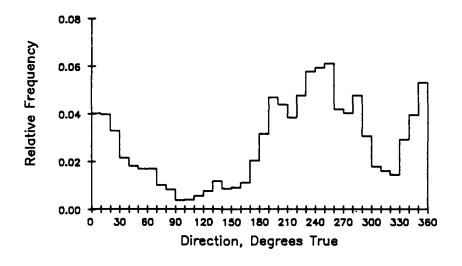


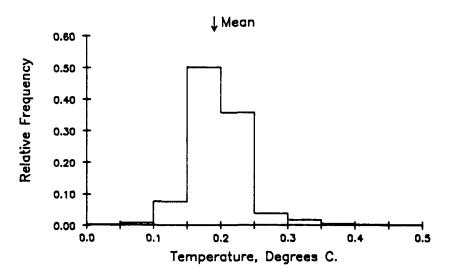
3535 METERS AT MOORING 4. TAPE 503/59.



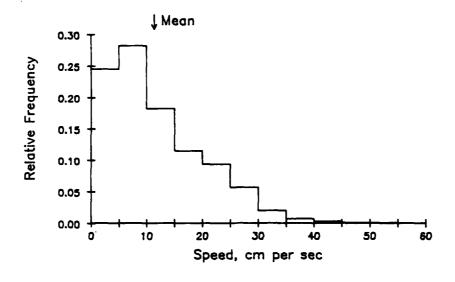
4535 METERS AT MOORING 4. TAPE 1534/34.

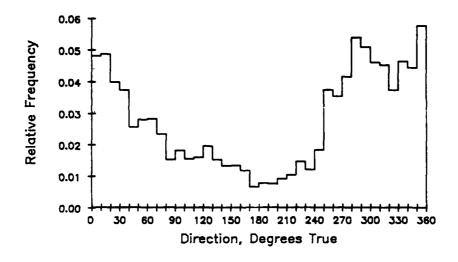


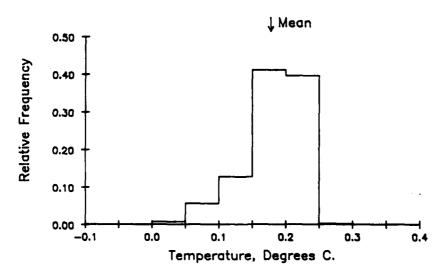




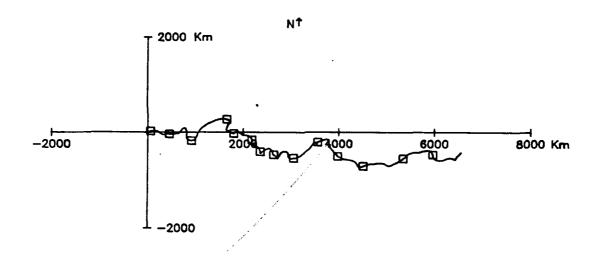
5335 METERS AT MOORING 4. TAPE 4418/25.

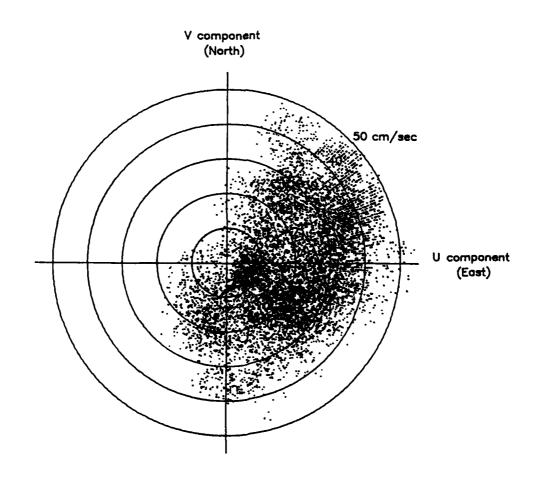


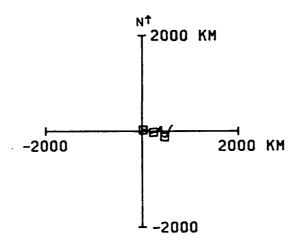


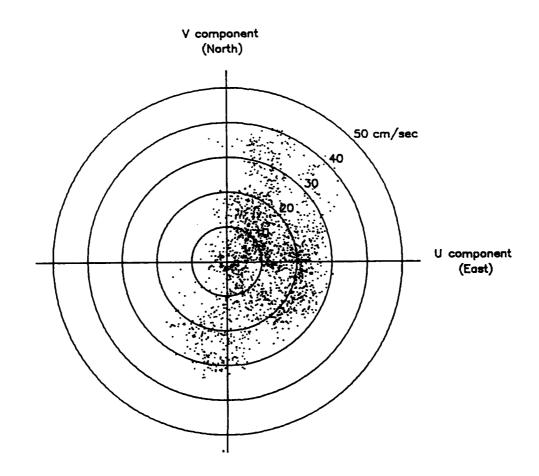


985M AT MOORING 4. 28 JAN 86 - 27 MAR 87. TAPE 3123/38.

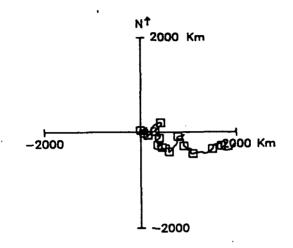


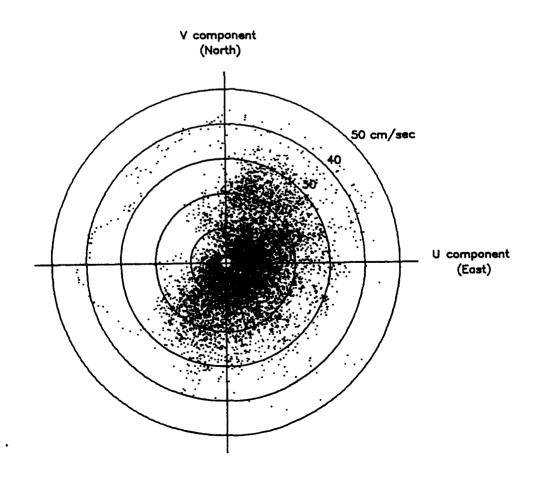




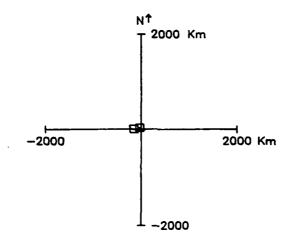


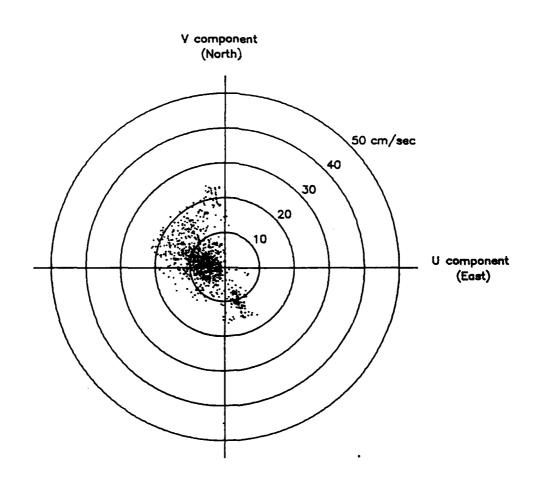
2520M AT MOORING 4. 28 JAN 86 - 27 MAR 87. TAPE 7162/12.



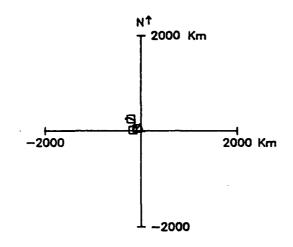


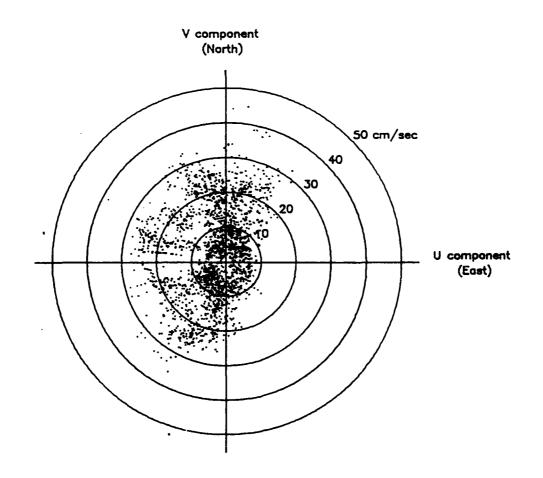
3535M AT MOORING 4. 28 JAN 86 - 17 MAR 86. TAPE 503/59.



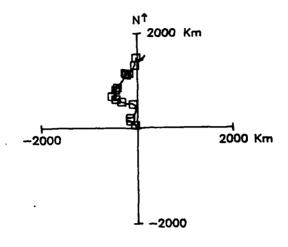


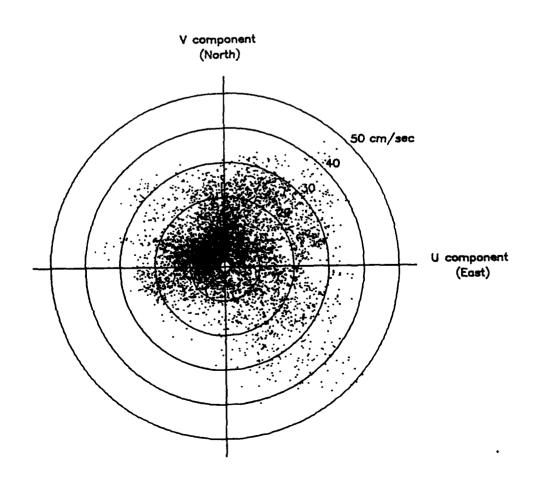
4535M AT MOORING 4. 2 AUG 86 - 15 NOV 86. TAPE 1534/34.

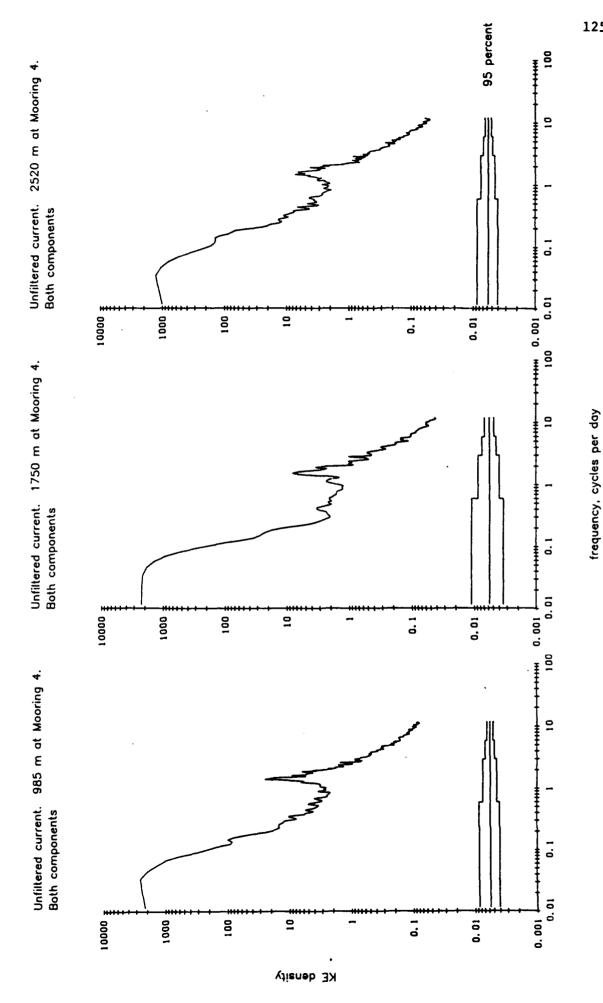




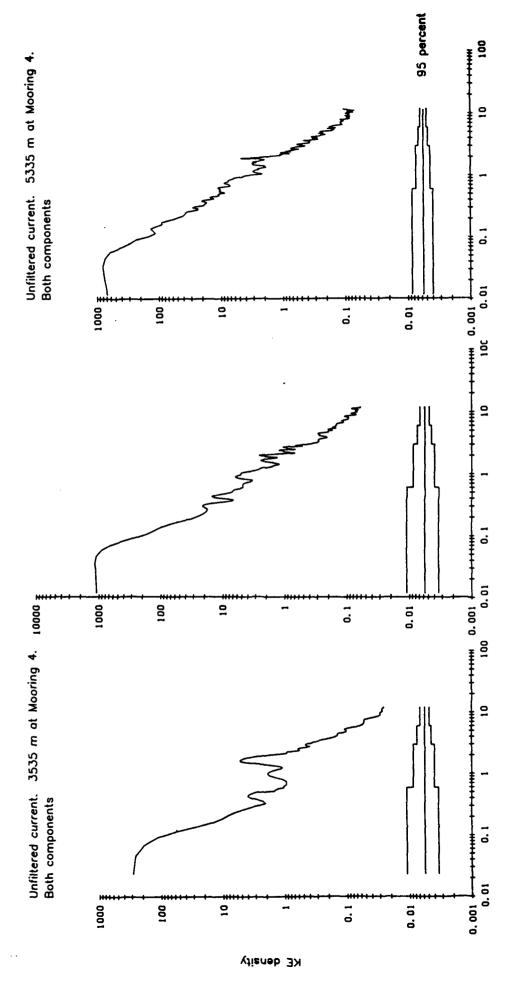
5335M AT MOORING 4. 28 JAN 86 - 27 MAR 87. TAPE 4418/25.





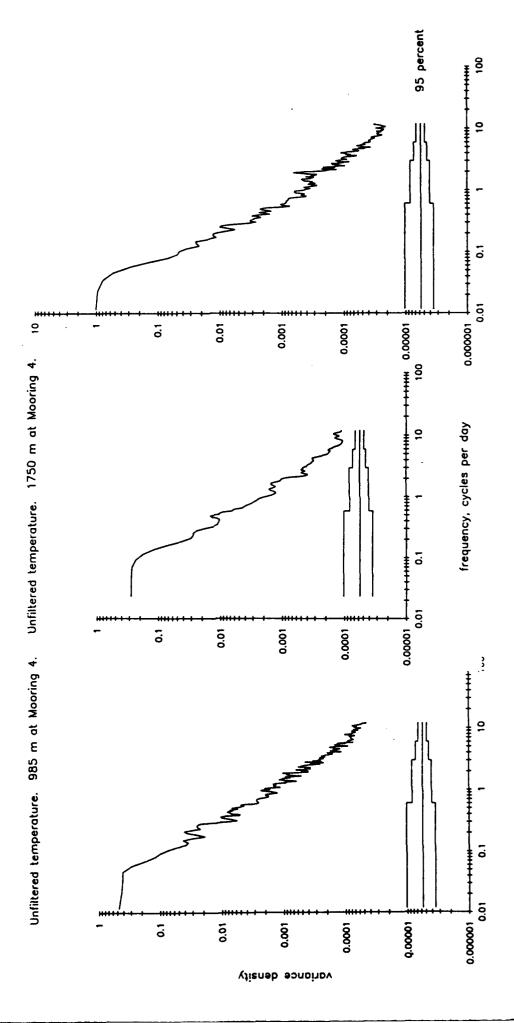


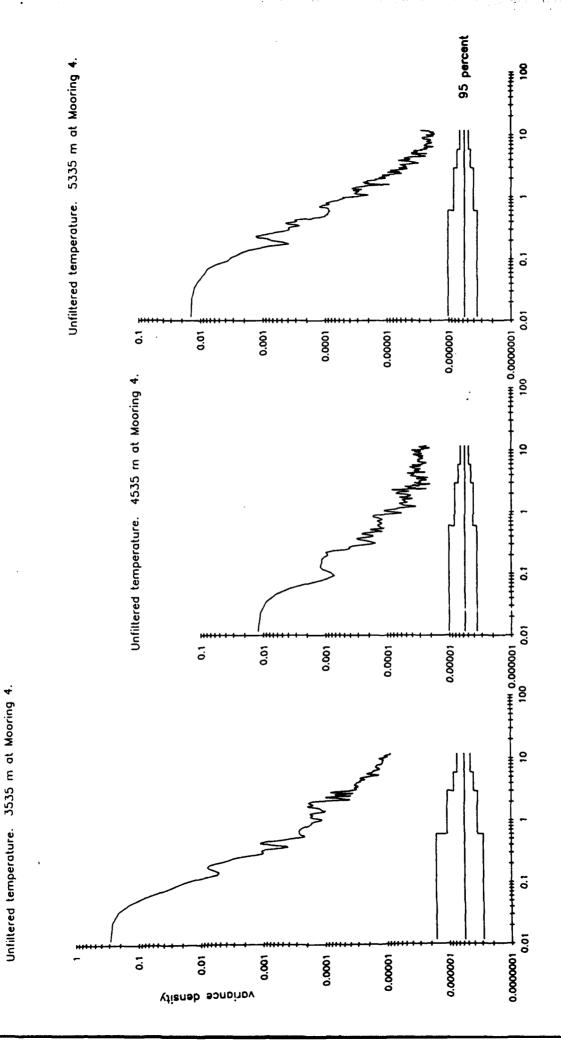
Unfiltered current. 4535 m at Mooring 4. Both components



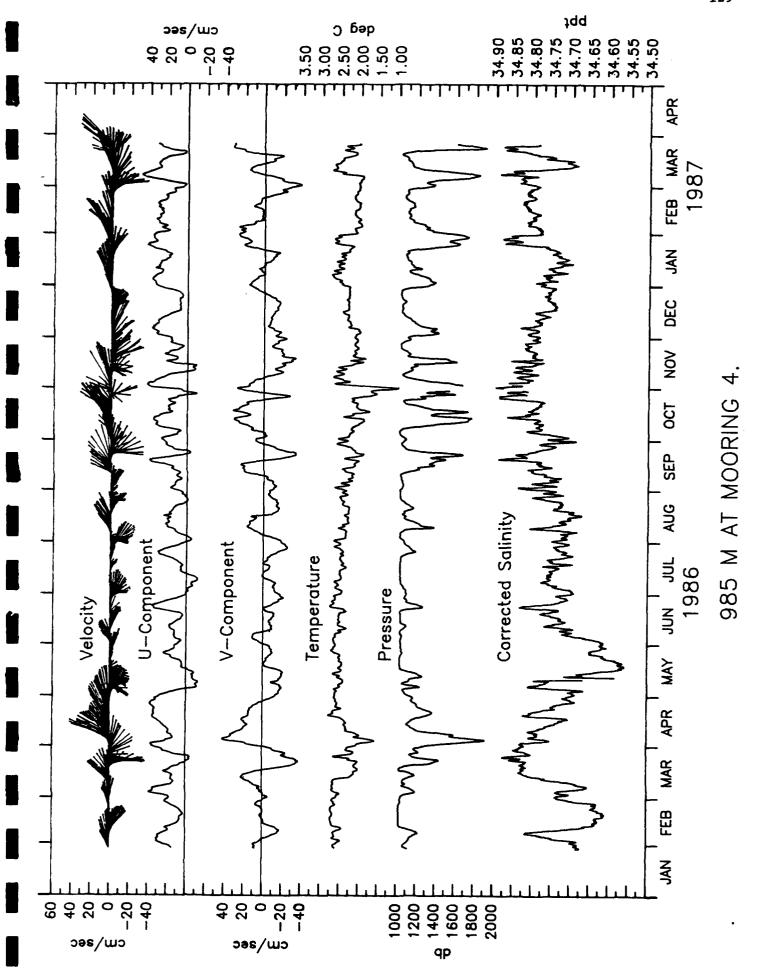
frequency, cycles per day

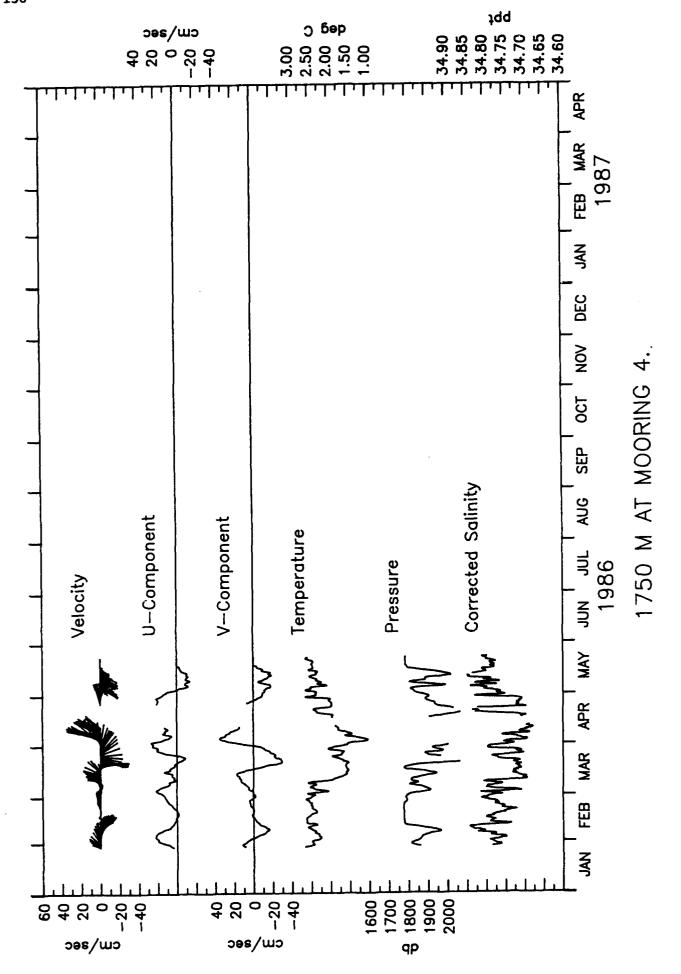
Unfiltered temperature. 2520 m at Mooring 4.

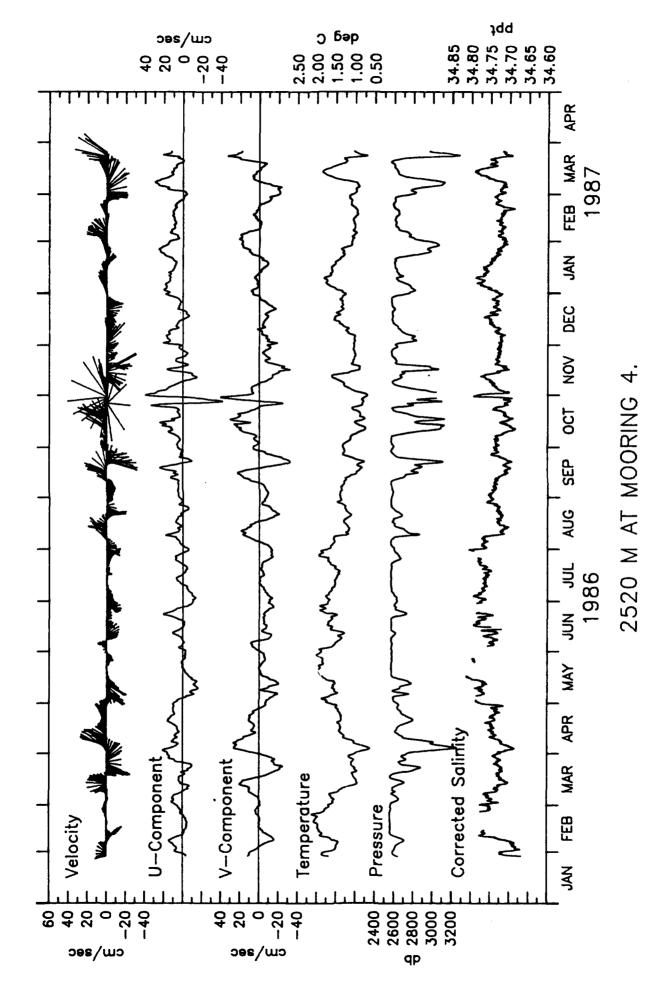


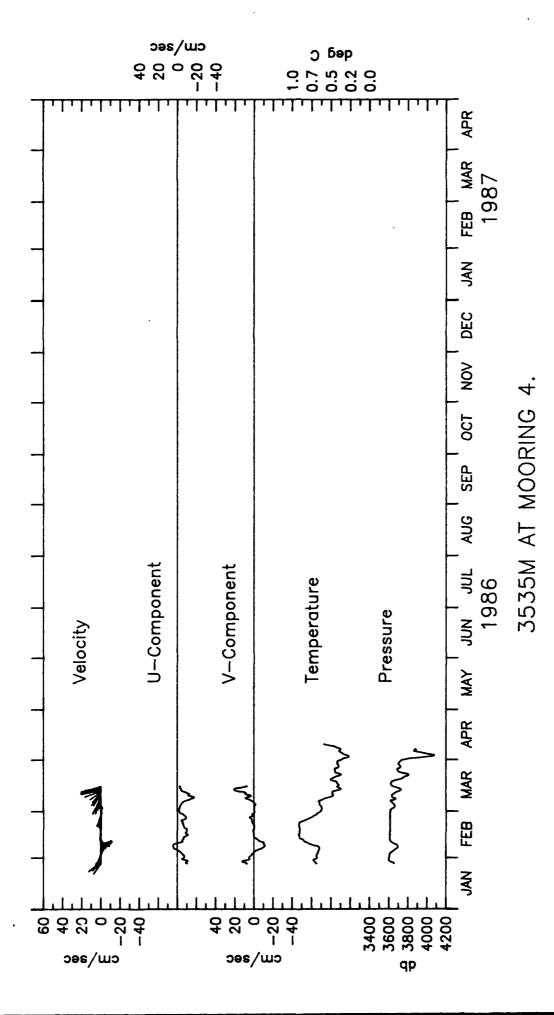


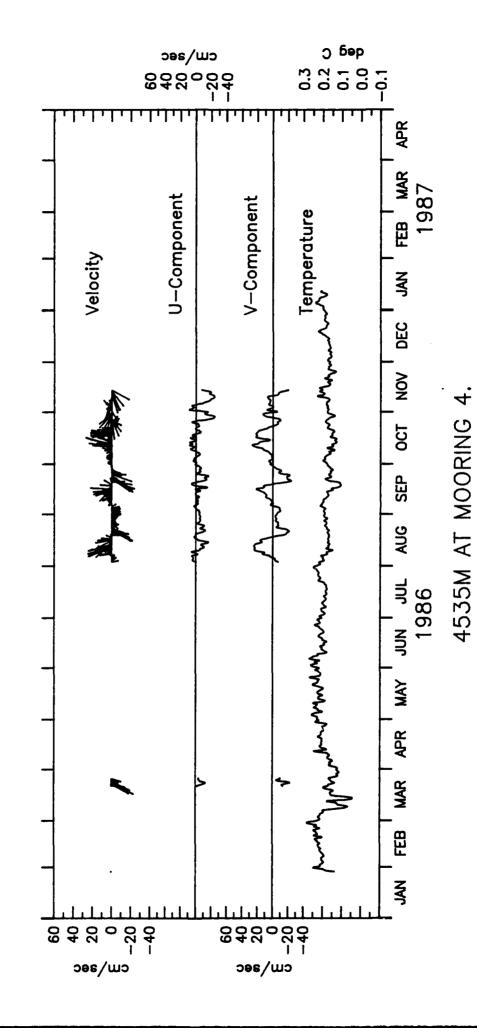
frequency, cycles per day

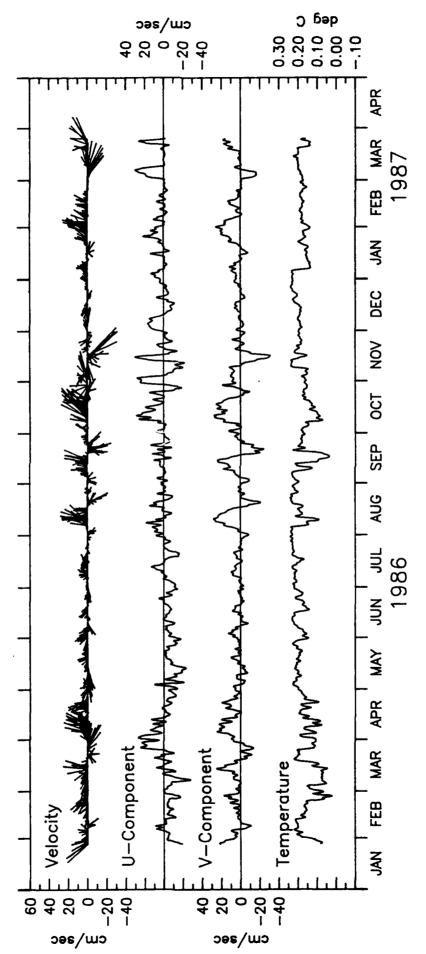




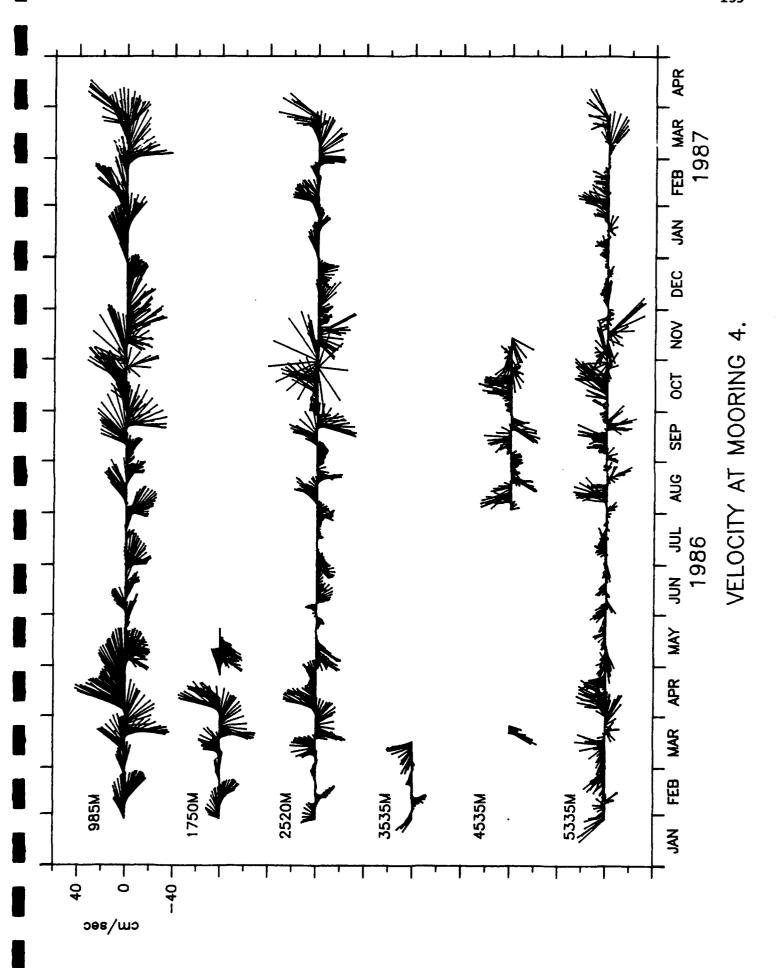


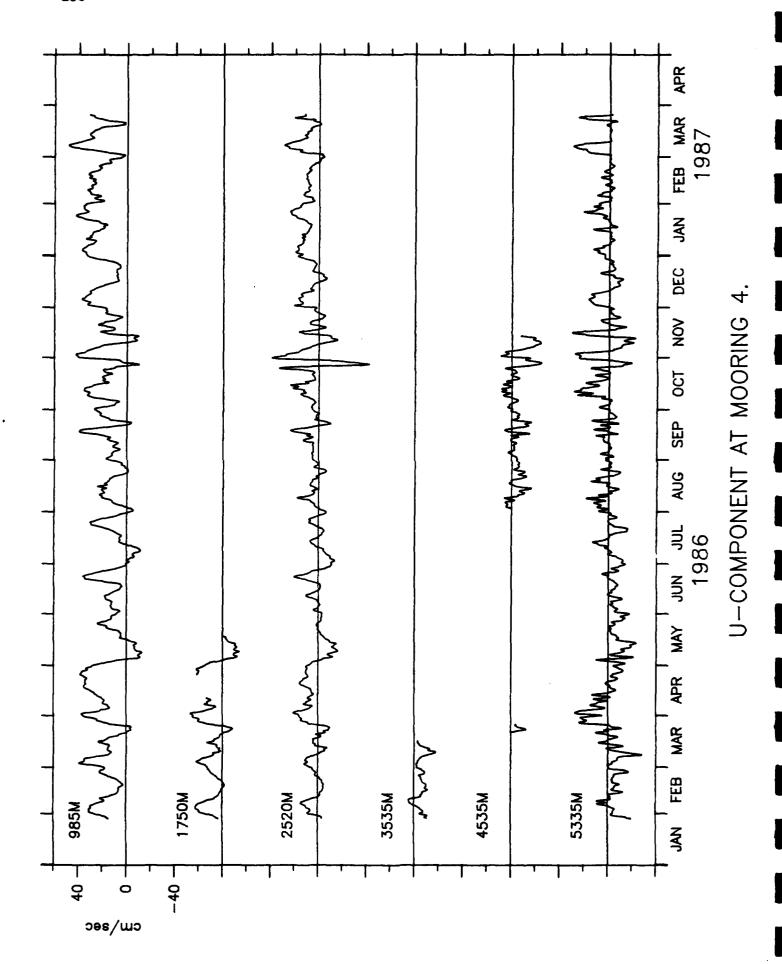


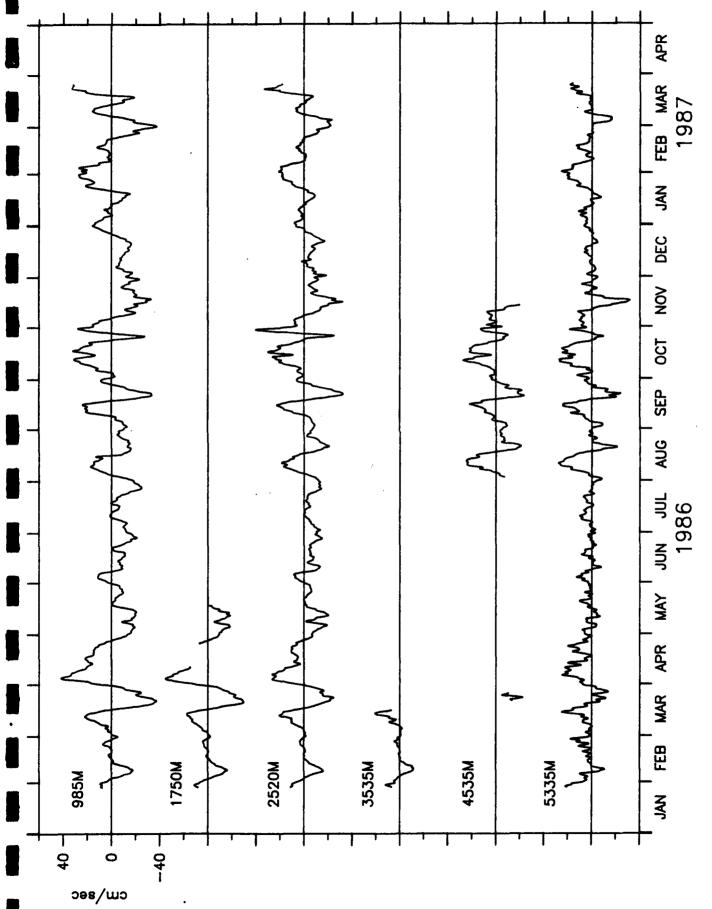




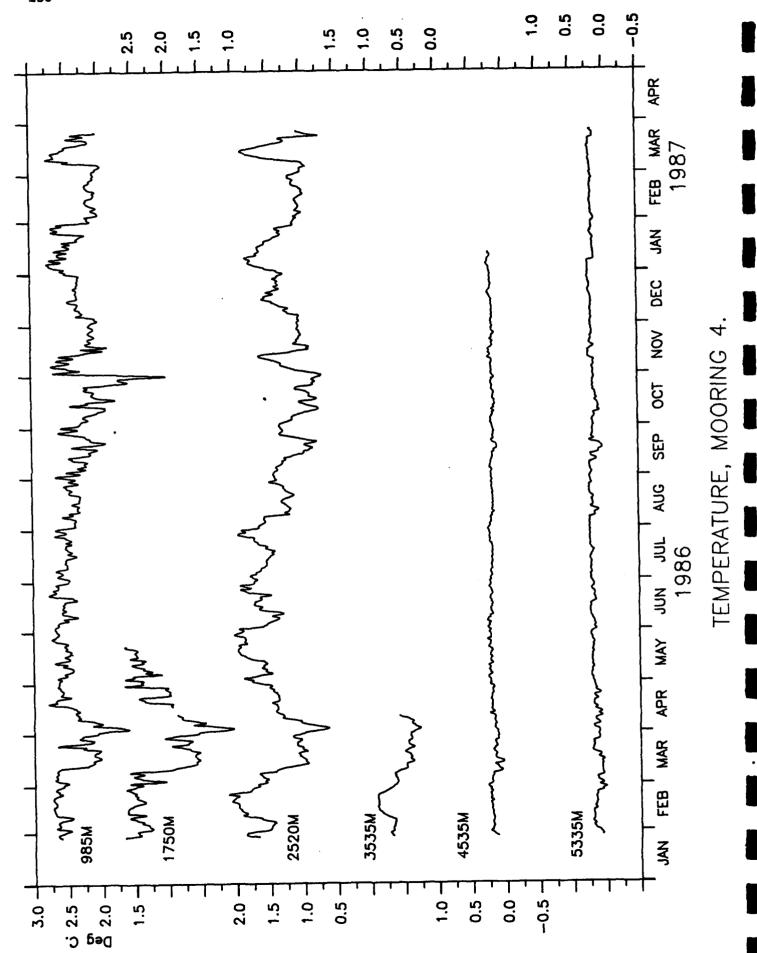
5335M AT MOORING 4.

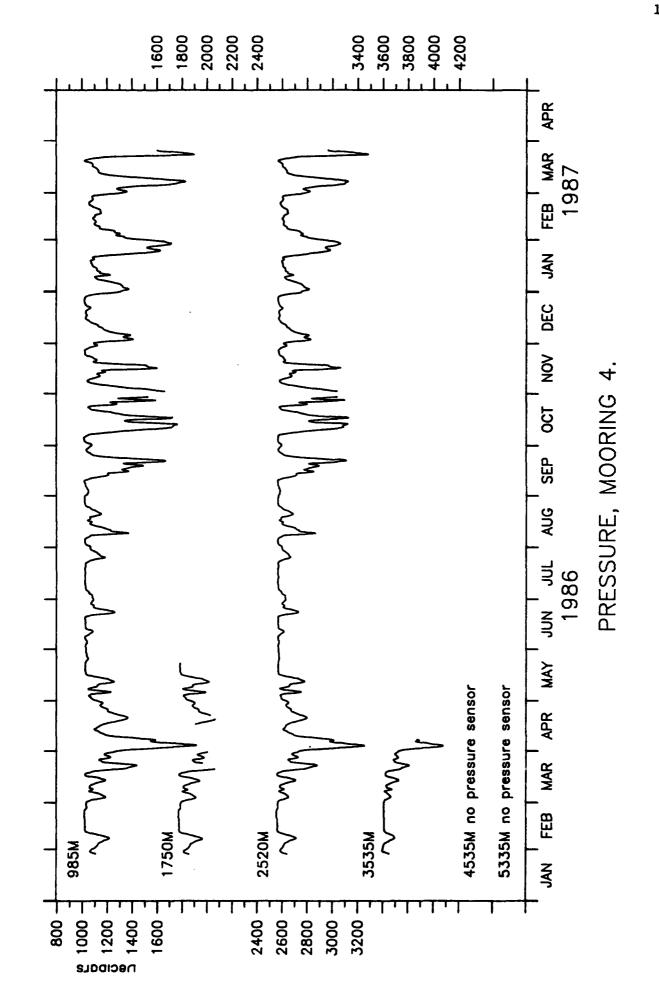


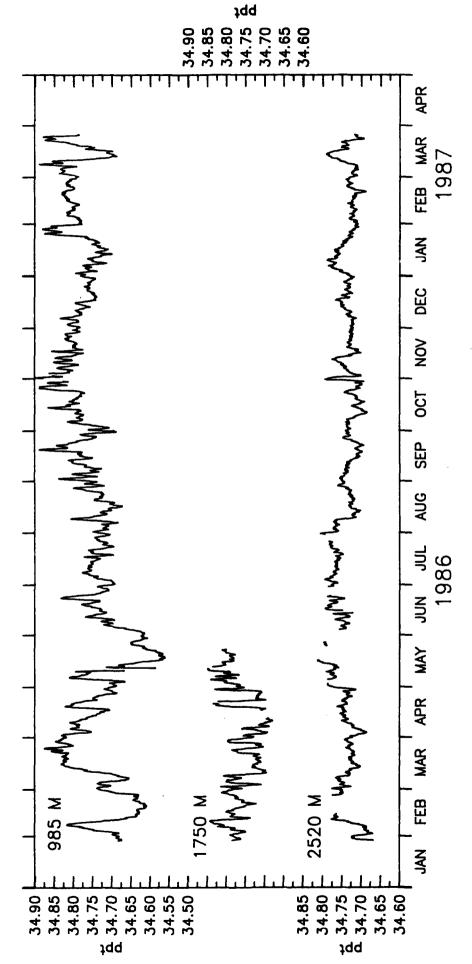




V-COMPONENT AT MOORING 4.







CORRECTED SALINITY AT MOORING 4.

MOORING 5

48°31.00'S, 41°18.61'W

1986 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN 1750 M 3620 M 4480 M 5940 M 5940 M	
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MOORING 5. UNFILTERED HOURLY DATA

1750M AT MOORING 5. 1800 28 JAN 86 - 1500 15 APR 87. TAPE 7164/12.

	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT	
s	23.97	12.00	0.80	75.00	10606	(1500	15 AP	R 87)
		16.31				•	15 AP	•
		14.71					15 AP	
T	2.25	0.43	0.55	3.00	10606	(1500	15 AP	R 87)
P	1777.55	0.43 50 .97	1746.30	2094.00	878	(0700	6 MA	R 86)
						(,
24	65M AT MO	ORING 5.	1800 28	JAN 86 -	0700 3	APR 86.	TAPE	4580/4.
s	11.31	6.63	0.80	32.80	1550	(0700	3 AP	R 86)
U	0.68	8.20	-26.50	25.60	1550		3 AP	
V	-6.17	8.12	-29.50	25.10	1550		3 AP	
T	1.83	0.39	1.00	2.48	1550	(0700	3 AP	
P	2561.03	0.39 110.66	2490.30	3033.80	1550	(0700		R 86)
						`		•
35	20M AT MO	ORING 5.	1900 28	JAN 86 -	1500 15	APR 87	. TAP	E 1244/38.
S	15.41	9.09	0.70	53.80	10605	(1500	15 AP	R 87)
U	4.29	13.23	-45.30	49.80	10605	(1500	15 AP	R 87)
V	-4.78	10.19	-45.50	35.20	10605	(1500	15 AP	R 87)
T	0.76	0.22	0.19	1.24	10605	(1500	15 AP	R 87)
P	15.41 4.29 -4.78 0.76 3747.67	244.02	3523.00	4872.00	10605	(1500	15 AP	R 87)
44	OM TA MO	ORING 5.	1800 28	JAN 86 -	1300 3	OCT 86.	TAPE	1245/43.
S	14.58	8.82	0.70	53.10	5487	(1000	14 SE	P 86)
U	-4.15 -6.94	10.77	-51.50	30.30	5487	(1000	14 SE	P 86)
V	-6.94	10.44	-34.00	27.40	5487	(1000	14 SE	P 86)
T	0.32	0.04	0.21	0.46	5947	(1300	3 OC	T 86)
P	4669.07	132.65	4535.00	5390.00	5947	(1300	3 OC	T 86)
59	40M AT MO	ORING 5.	1800 28	JAN 86 -	1500 15	APR 87	. TAP	E 4416/34.
s	15.65	9.74	0.80	57.60	10606	(1500	15 AP	R 87)
U	5.29	12.06	-41.50	55.60	10606	(1500	15 AP	R 87)
V		11.38			10606	•	15 AP	•
T	0.28	0.04	0.16			•	15 AP	•
(1750 M) PRESSURE SENSOR OVERRANGED, RECORD TERMINATED EARLY								

- (1750 M) PRESSURE SENSOR OVERRANGED, RECORD TERMINATED EARLY
- (2465 M) INSTRUMENT FLOODED, SHORT RECORD.
- (4480 M) LOW BATTERY CAUSED PREMATURE INSTRUMENT FAILURE
- (Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB.)

MOORING 5. LLP FILTERED 6-HOURLY DATA

1750M AT MOORING 5.	1800 29 JAN 86 - 1200 14 APR 87. TAPE 7164/	12.
MEAN SD	MIN MAX LENGTH ENDS AT	
U 14.78 15.95 V -4.32 14.31	-52.17 48.97 1760 (1200 14 APR 87) -59.12 66.26 1760 (1200 14 APR 87)	
T 2.25 0.43 P 1771.59 32.95		
2465M AT MOORING 5.	1800 29 JAN 86 - 0600 2 APR 86. TAPE 4580/4	•
U 0.71 7.83 V -6.62 6.94	-19.24 21.05 251 (0600 2 APR 86) -22.70 17.44 251 (0600 2 APR 86)	
T 1.83 0.39	1.09 2.42 251 (0600 2 APR 86)	
P 2558.77 107.62	2492.39 3039.86 251 (0600 2 APR 86)	
3520M AT MOORING 5.	0000 30 JAN 86 - 1200 14 APR 87. TAPE 1244/	38.
	-37.53 42.54 1759 (1200 14 APR 87)	
	-32.95 28.09 1759 (1200 14 APR 87)	
P 3748.55 243.62	0.23 1.19 1759 (1200 14 APR 87) 3528.31 4868.73 1759 (1200 14 APR 87)	
4480M AT MOORING 5.	0000 30 JAN 86 - 1200 2 OCT 86. TAPE 1245/4	3.
U -4.20 10.41	-45.70 26.30 906 (0600 13 SEP 86)	
V -7.08 10.01		
T 0.32 0.04	0.23 0.43 983 (1200 2 OCT 86)	
P 4669.58 132.46	0.23 0.43 983 (1200 2 OCT 86) 4534.68 5371.45 983 (1200 2 OCT 86)	
5940M AT MOORING 5.	1800 29 JAN 86 - 1200 14 APR 87. TAPE 4416/3	4.
U 5.32 11.61	-27.96 42.14 1760 (1200 14 APR 87)	
V -6.09 10.93	-44.68 26.92 1760 (1200 14 APR 87)	
T 0.28 0.04	0.16 0.34 1760 (1200 14 APR 87)	

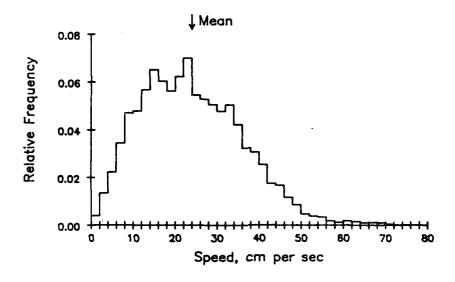
(1750 M) PRESSURE SENSOR OVERRANGED, RECORD TERRMINATED EARLY.

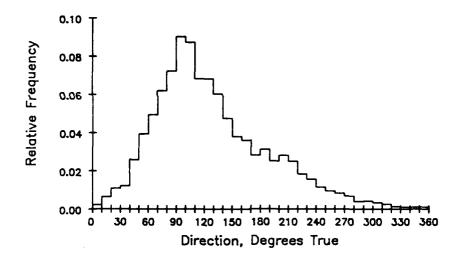
(2465 M) INSTRUMENT FLOODED, SHORT RECORD

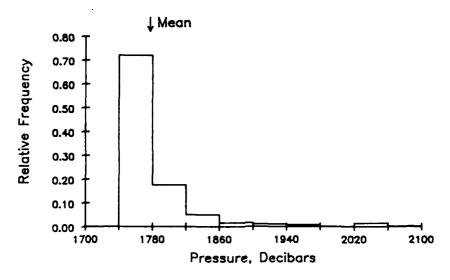
(4480 M) LOW BATTERY CAUSED PREMATURE INSTRUMENT FAILURE.

(Speed, u, and v are given in cm/sec, Temperature in 'C, Pressure in DB, and Corrected Salinity in ppt.)

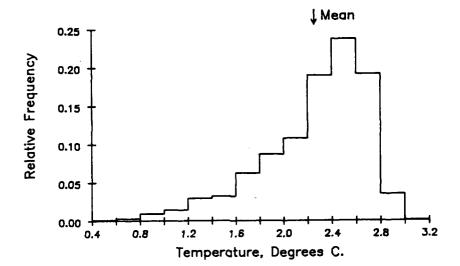
1750 METERS AT MOORING 5. TAPE 7164/12.



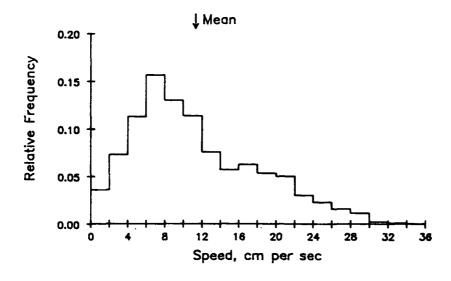


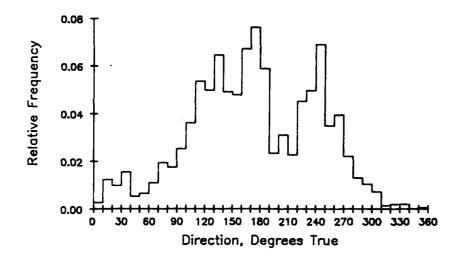


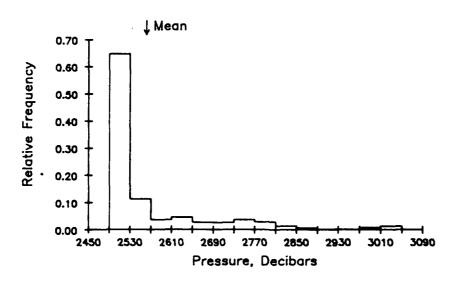
1750 METERS AT MOORING 5. TAPE 7164/12.



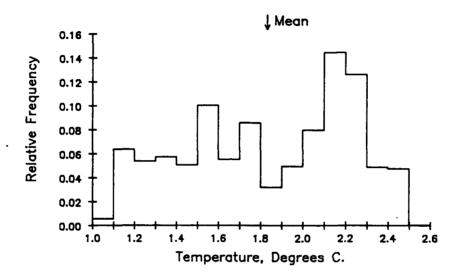
2465 METERS AT MOORING 5. TAPE 4580/4.



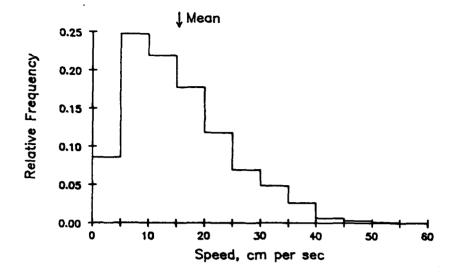


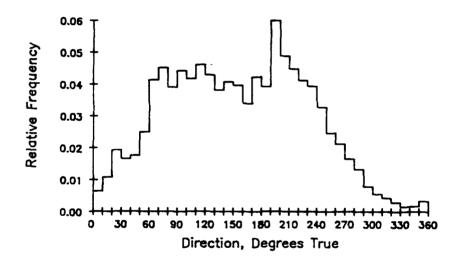


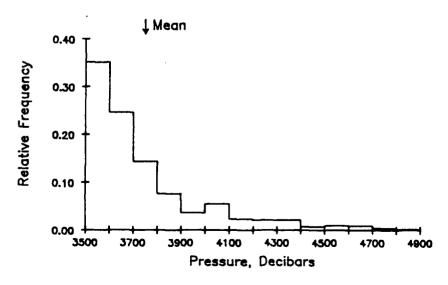
2465 METERS AT MOORING 5. TAPE 4580/4.



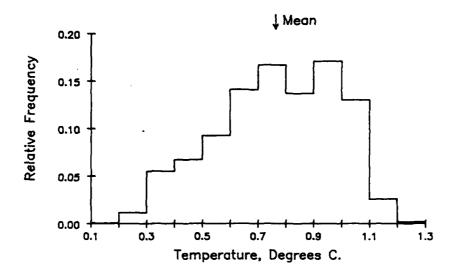
3520 METERS AT MOORING 5. TAPE 1244/38



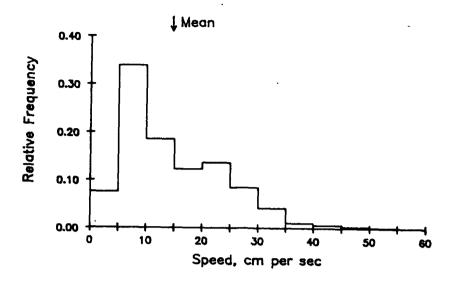


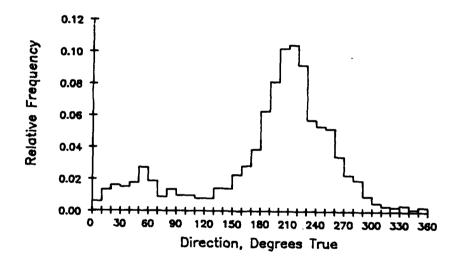


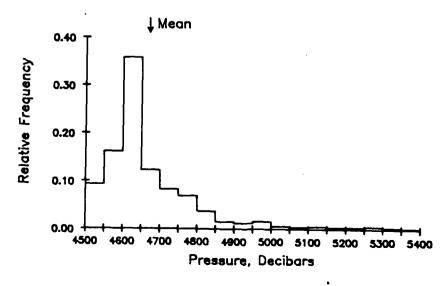
3520 METERS AT MOORING 5. TAPE 1244/38.



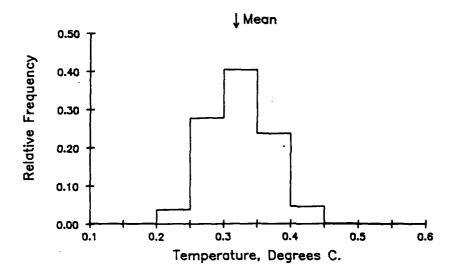
4480 METERS AT MOORING 5. TAPE 1245/43.



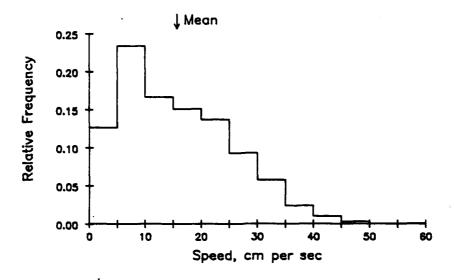


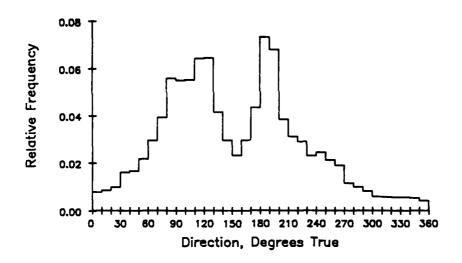


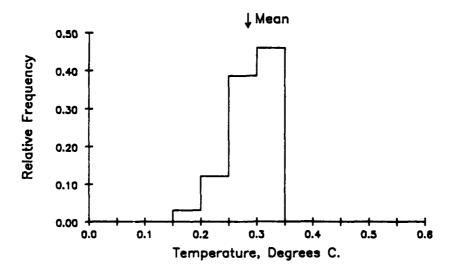
4480 METERS AT MOORING 5. TAPE 1245/43.

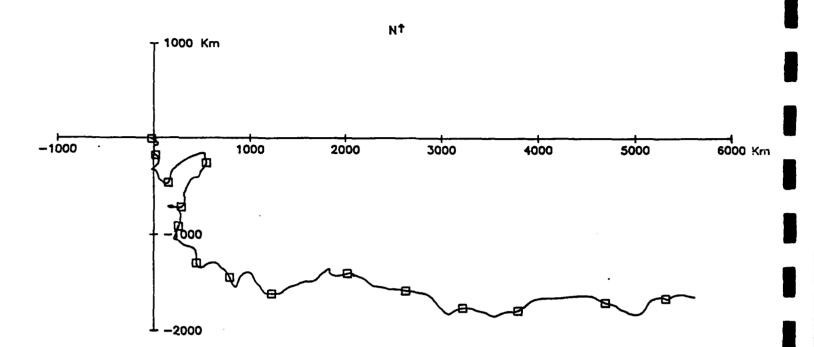


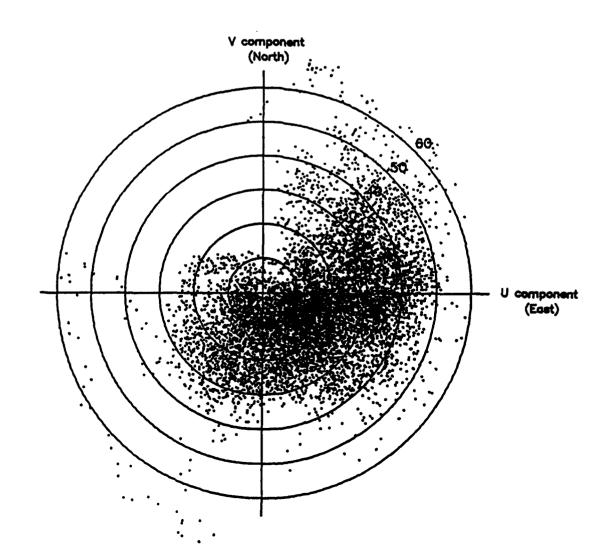
5940 METERS AT MOORING 5. TAPE 4416/34.

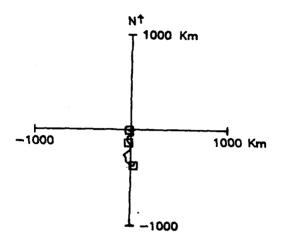


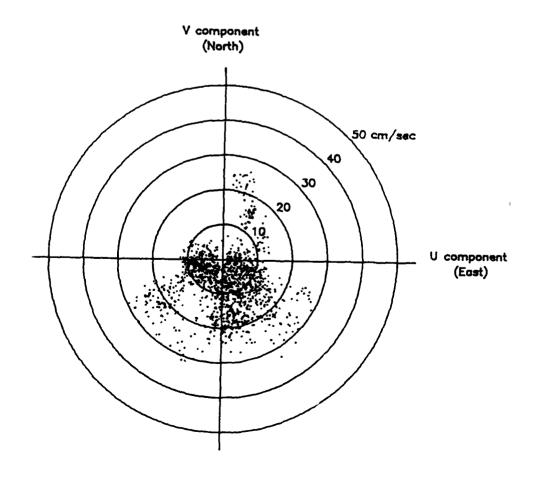


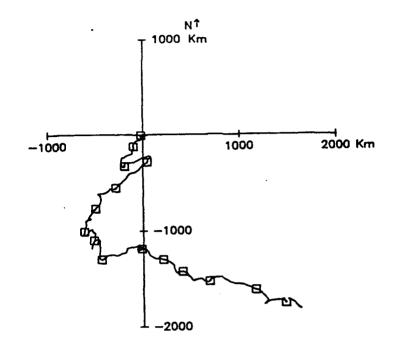


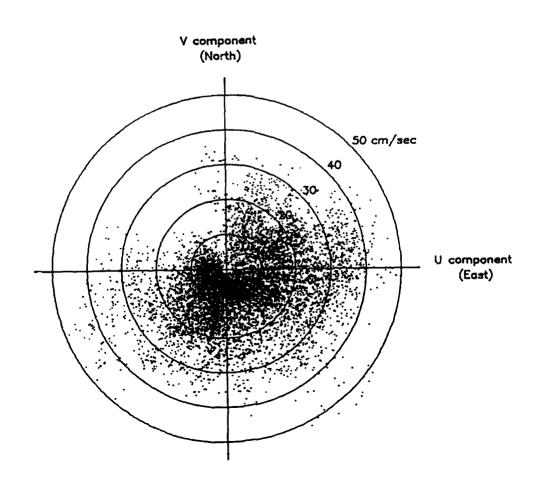




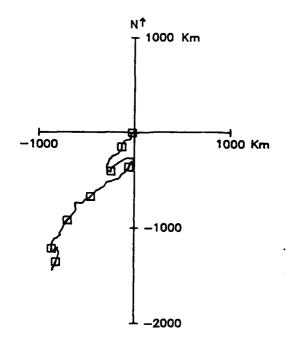


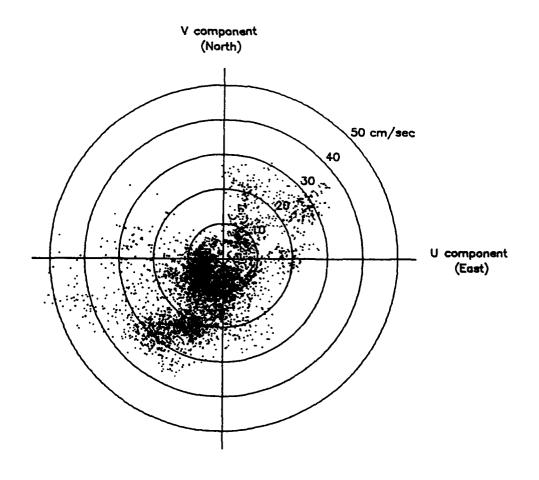




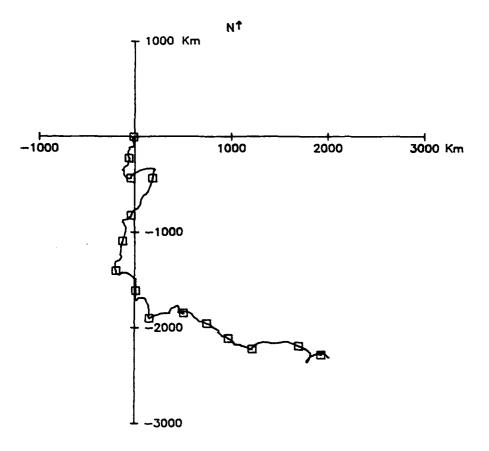


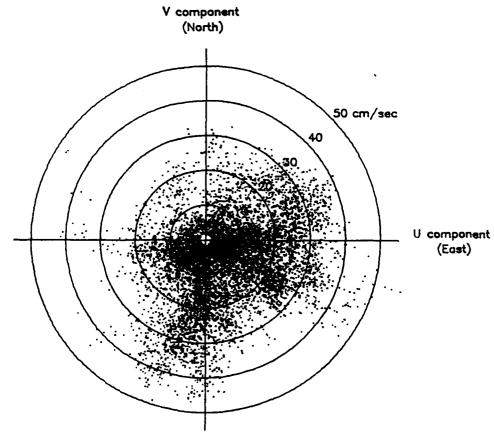
4480M AT MOORING 5. 28 JAN 86 - 14 SEP 86. TAPE 1245/43.



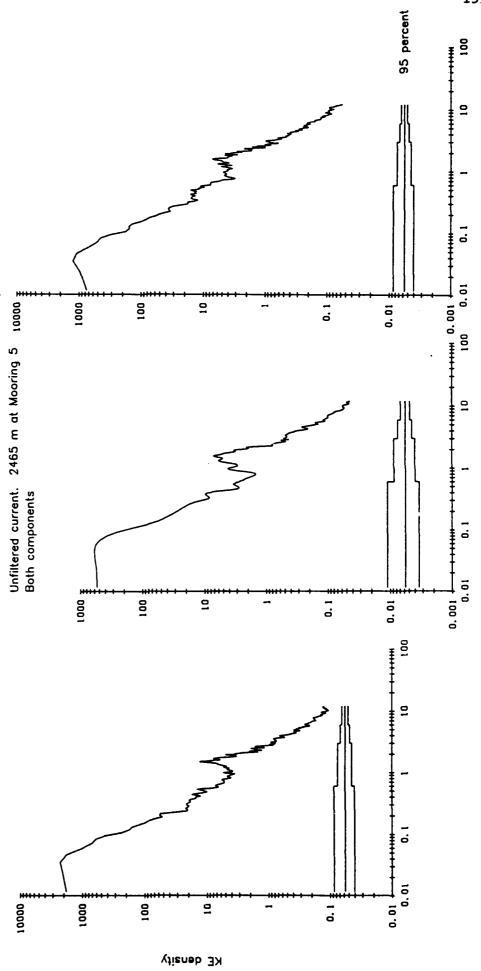


5940M AT MOORING 5. 28 JAN 86 - 15 APR 87. TAPE 4416/34.





frequency, cycles per day



Unfiltered current. 3520 m at Mooring 5. Both components

Unfiltered current. 1750 m at Mooring 5. Both components



10000 ₹

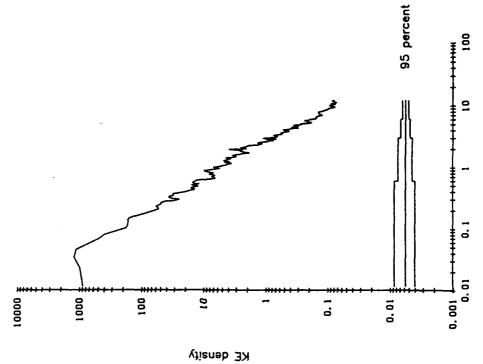
1000

100

10

KE density





frequency, cycles per day

95 percent

0.01

1001 1001

0.01

0.001

frequency, cycles per day

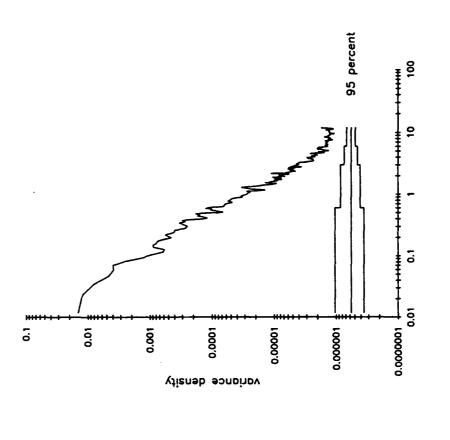
frequency, cycles per doy

95 percent Unfiltered temperature. 3520 m at Mooring 5. 0.0 ٥. 0.00001 0.0 0.001 0.0001 1000001 Unfiltered temperature. 2465 m at Mooring 5. 5 0.0 \$ 10000001 \$ 0.1 0.01 0.001 0.0001 0.00001 10 ₹ 0.000001 <u>.</u> 0.00001 0.0001 0.0 0.001 variance density

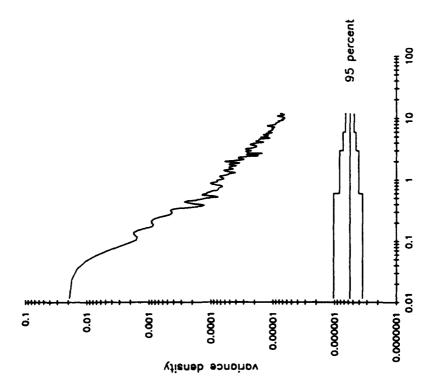
Unfiltered temperature. 1750 m at Mooring 5.



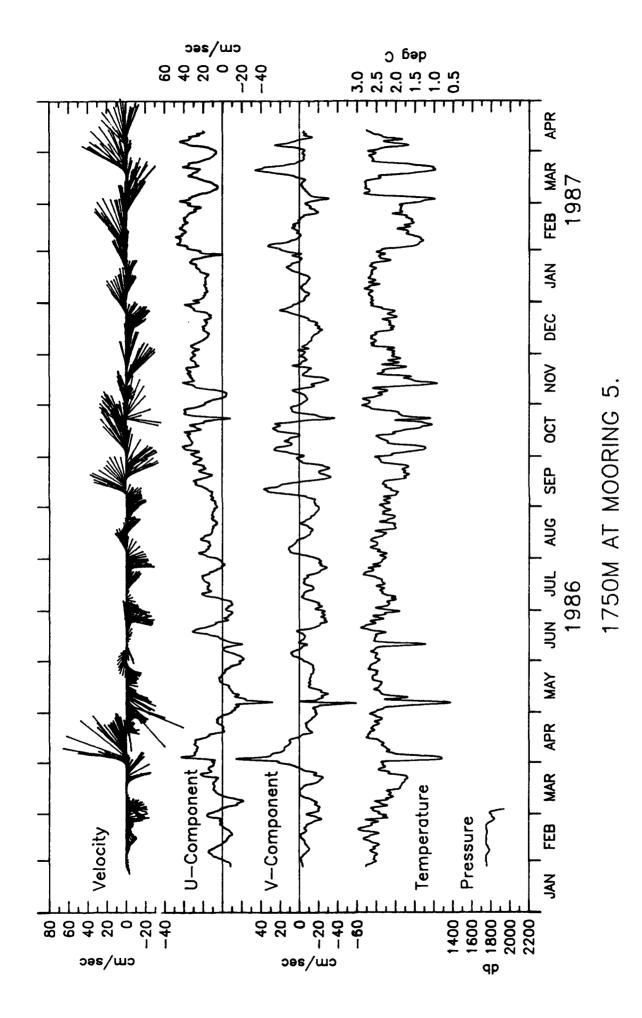
Unfiltered temperature. 5940 m at Mooring 5.

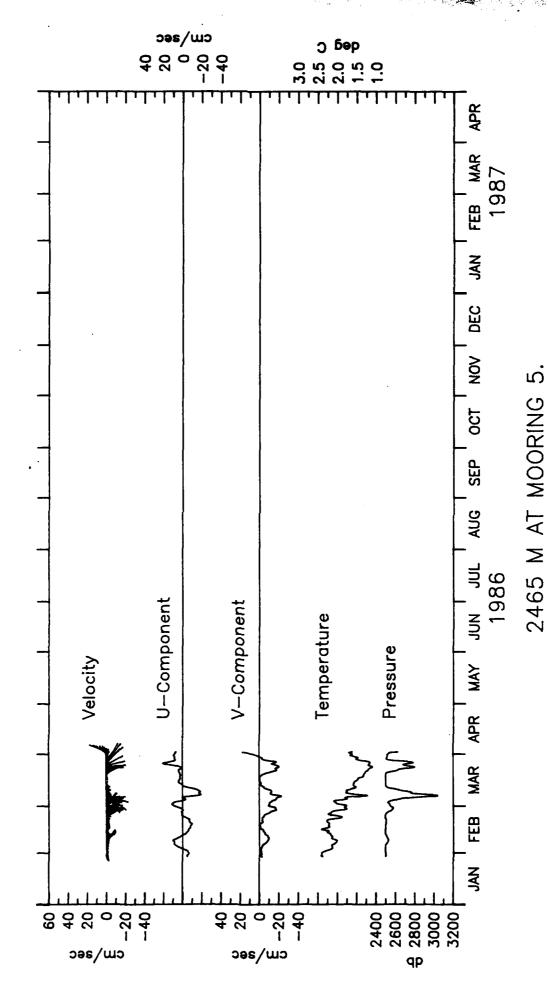


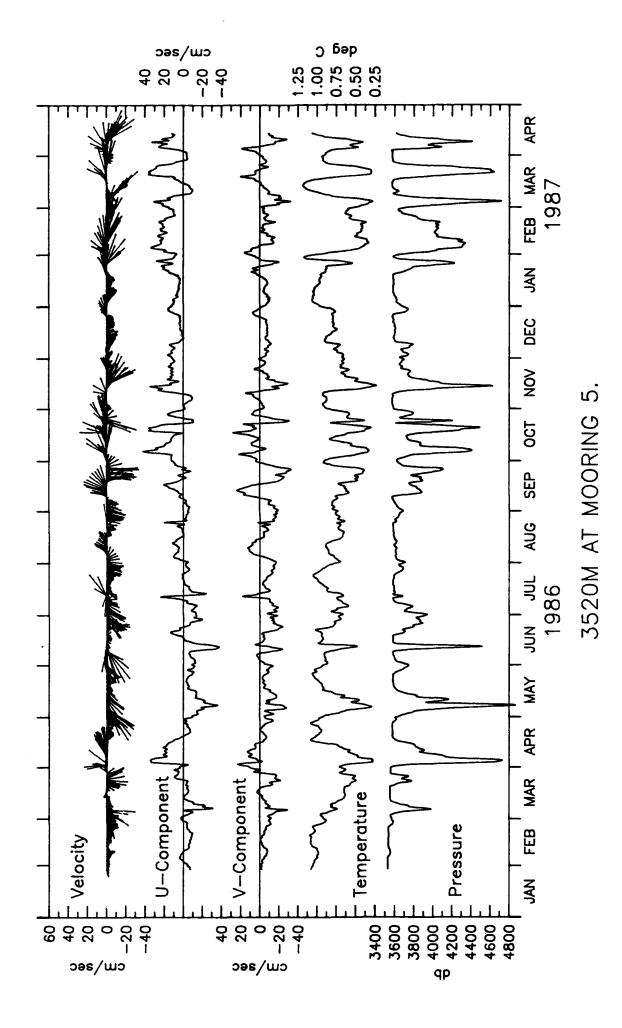
frequency, cycles per day

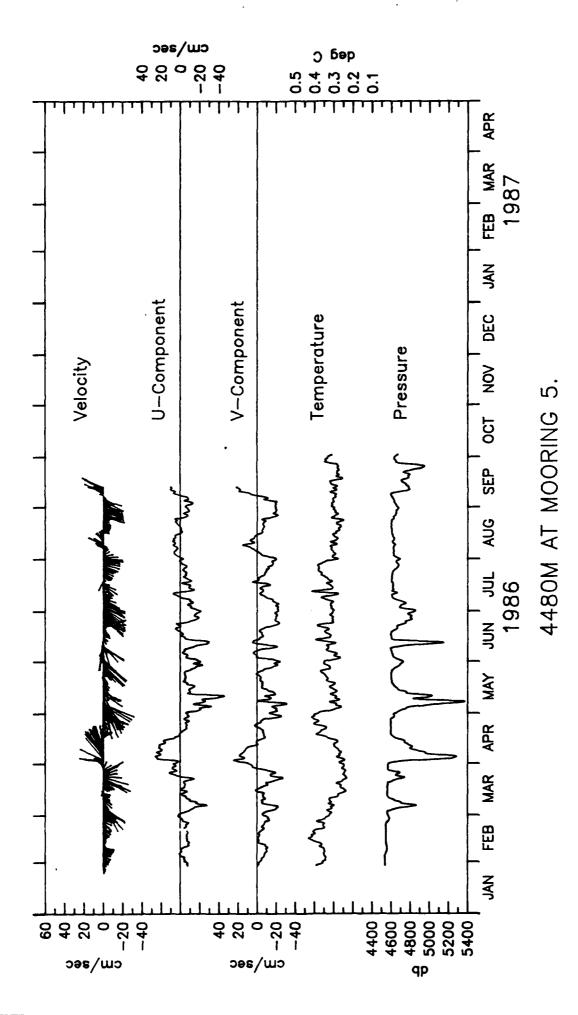


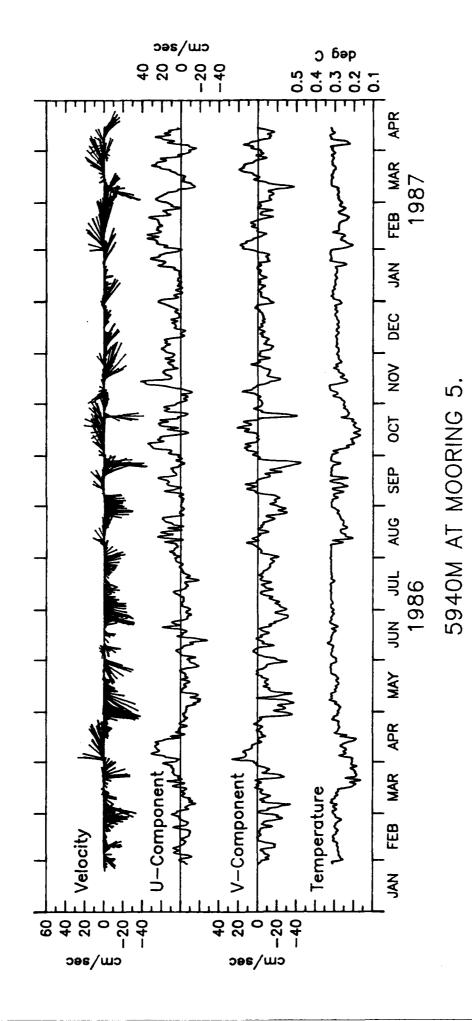
frequency, cycles per day

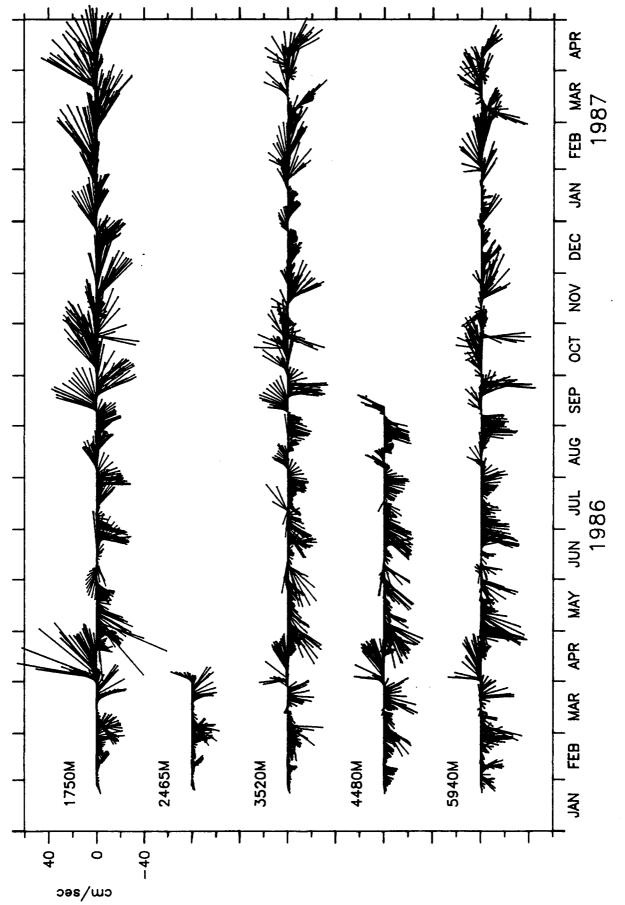




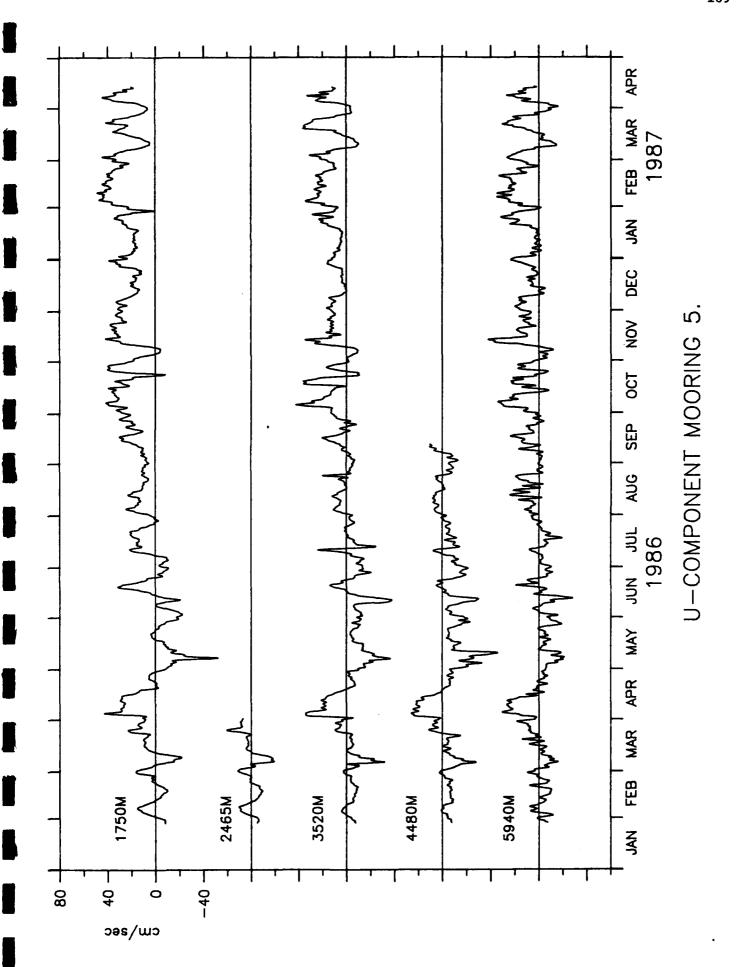


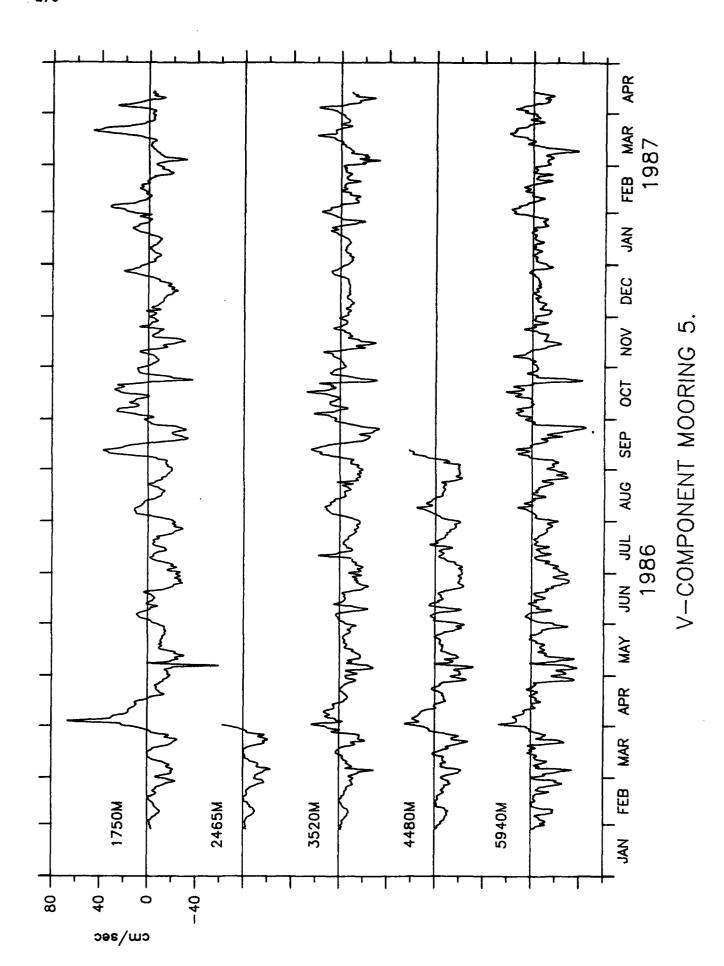


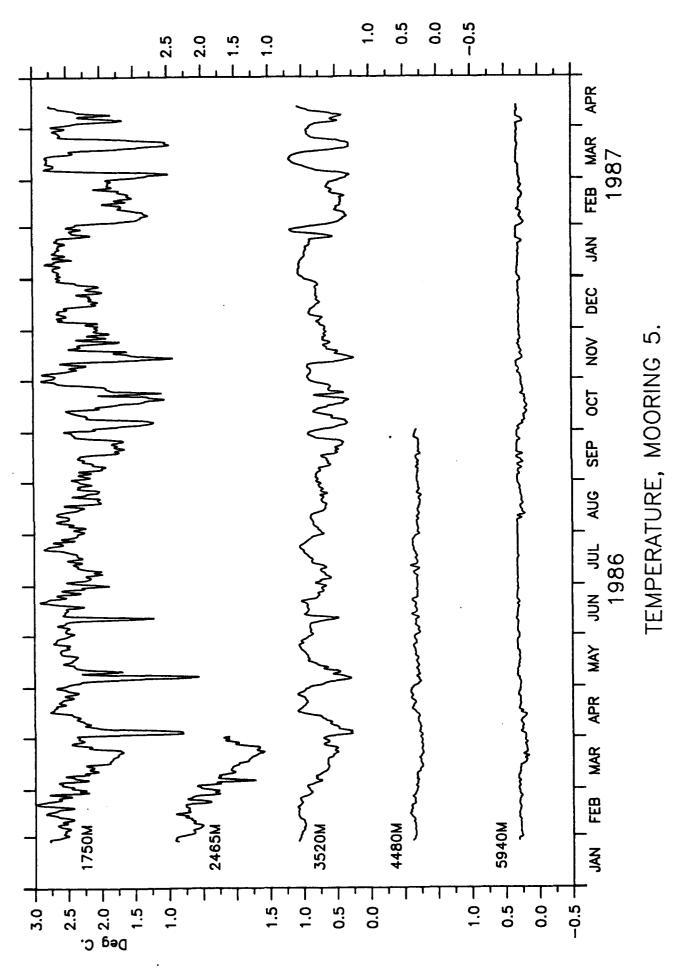


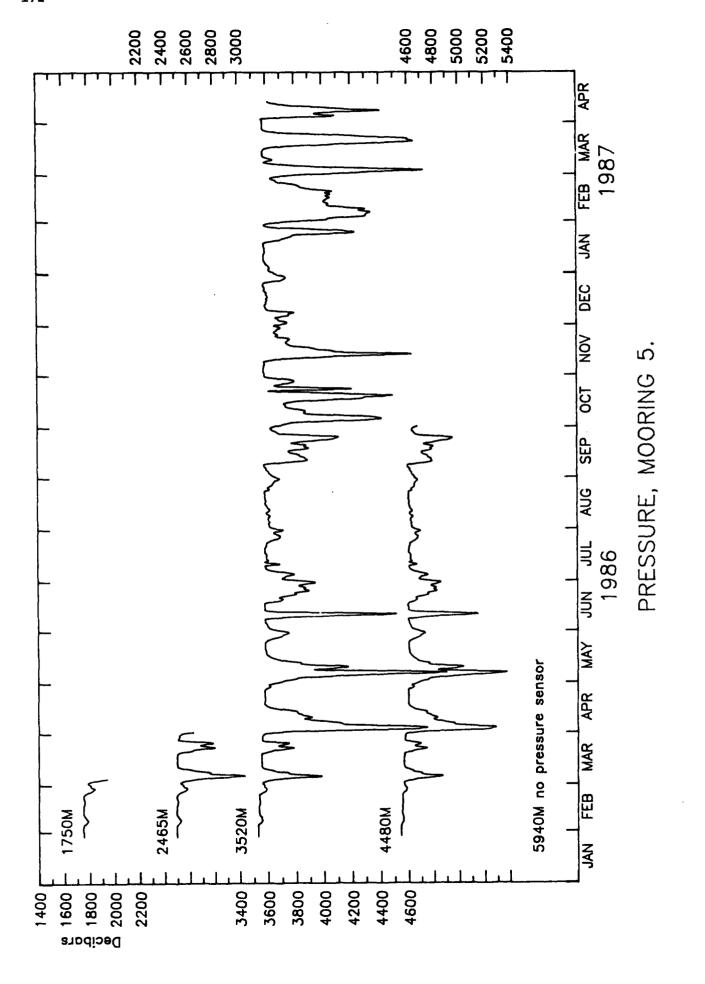


VELOCITY, MOORING 5.



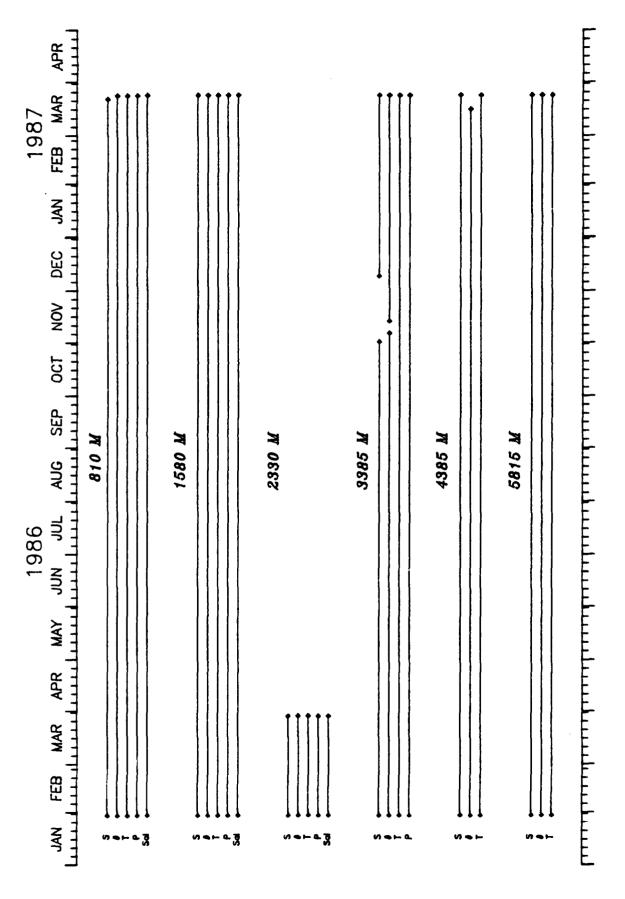






MOORING 6

48°07.00'S, 41°17.00'W



DATA RETURN FROM MOORING 6.

MOORING 6. UNFILTERED HOURLY DATA

810M AT MO	ORING 6.	0000 2	MAT. PS	86 -	1000	25 MAR	87.	TAPE	7165/12.
OTOM MI MO	01/T140 0 °	0000 2	5 J C 6741	00	T 0 0 0		0,.	7111	, 100/ 10:

-							
	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
s	26.39	10.52	0.80	72.30	10045	(1300	23 MAR 87)
U	16.02			70.70	10045		23 MAR 87)
V	- 7.73				10045		23 MAR 87)
				36.50			
T	2.67	0.20	1.53		10091		25 MAR 87)
P	1086.49	248.11	821.60	2100.80	9987	(1000	25 MAR 87)
15	SOM AT MOS	RING 6.	0100 29 J	AN 86 - 1	200 25	MAR 87.	TAPE 4578/5.
S	19.34	9.02	0.80	53.90	10092	(1200	25 MAR 87)
U	11.47	12.43	-32.00	53.80	10092	(1200	25 MAR 87)
V	- 5.92	11.59	-50.40	32.10	10092	(1200	25 MAR 87)
${f T}$	2.50	0.26	1.04	3.11	10092	(1200	25 MAR 87)
P	1862.64	256.23	1.04 1597.30	3157.30	10092		25 MAR 87)
						,	,
23	30M AT MOC	ORING 6.	0000 29 J	AN 86 - 0	400 29	MAR 86.	TAPE 4581/5.
s	13.58	8.27	0.80	34.90	1425	(0800	29 MAR 86)
U	2.64	9.33	-22 30	28 40	1425		29 MAR 86)
v	-7.94	9.78	-34.90 1.14	11.50	1425	(0800	29 MAR 86)
Ť	2.00	0.41	1.14	2.69	1425	(0800	29 MAR 86)
P	2542 76	209 54	2355.80	3215 90	1425	(0800	29 MAR 86)
•	2342.70	203.34	2333.00	3213.60	1425	0000)	29 FAR 50)
33	85M AT MOO	ORING 6.	0000 29 J	AN 86 - 1	100 25	MAR 87.	TAPE 1539/38.
s	14.32	7.93	0.80	50.70	9157	(1100	25 MAR 87)
U	3.93	10.32	- 32.50	38.30	9157	(1100	25 MAR 87)
v	-5.50	10.76	-47.00	46 00	9157	(1100	25 MAR 87)
Ť		0.21	0.30				25 MAR 87)
P	3600.76	172 72		4593.00	10092		25 MAR 87)
F	3000.70	1/2./3	3390.00	4593.00	10092	(1100	25 MAR 67)
43	85M AT MOO	RING 6.	0000 29 J	AN 86 - 1	100 25	MAR 87.	TAPE 5330/11.
							,
S	13.18	7.06	0.80	43.50	10092	(1100	25 MAR 87)
U	2.35	9.17	-28.90	33.80	9891	(0200	17 MAR 87)
V	-6.05	9.68	-42.30		9891		17 MAR 87)
\mathbf{T}	0.39	0.08	0.17	0.91	10092		25 MAR 87)
				- · · ·		,	

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB.)

MOORING 6. UNFILTERED HOURLY DATA

	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
5815M	AT MOORIN	G 6. (0000 29 JAN	86 - 11	00 25 MAR	87.	TAPE 7407/5.
s	14.52	7.76	0.80	44.00	10092	(1100	25 MAR 87)
U	0.43	10.11	-38.40	33.70	10092	(1100	25 MAR 87)
V	-5.52	11.76	-39.20	39.40	10092	(1100	25 MAR 87)
T	0.26	0.03	0.12	0.31	10092	(1100	25 MAR 87)

(810 M) SPEED BRIDGES LINES:
9947 - 9970 (1000 19 MAR 87 - 0900 20 MAR 87)
SPEED RECORD TERMINATED AT LINE
10046 (1300 23 MAR 86)
PRESSURE OFFSCALE, GAPS LINES:
2315 - 2350 (1000 5 MAY 86 - 2100 6 MAY 86)

4978 - 5003 (0900 24 AUG 86 - 1000 25 AUG 86) 6899 - 6940 (1000 12 NOV 86 - 0300 14 NOV 86)

(1580 M) SPEED BRIDGED, LINES: 2787 - 2891 (0300 25 MAY 86 - 1100 29 MAY 86)

(2330 M) INSTRUMENT DESTROYED BY FLOODING, SHORT RECORD.

(3385 M) SPEED GAPS LINES:
6628 - 7562 (0300 1 NOV 86 - 0100 10 DEC 86).
DIRECTION GAPS LINES:
6773 - 6958 (0400 7 NOV 86 - 2100 14 NOV 86)

(4385 M) DIRECTION RECORD ERRATIC AFTER LINE 9891 (0200 17 MAR 87), RECORD TERMINATED THERE.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 6. LLP FILTERED 6-HOURLY DATA

810M AT MOORING 6.	0000	30 JAN	86 -	0600	24	MAR	87.	TAPE	7165/12.
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	MEAN	SD	MIN	MAX	LENGTH	E	NDS AT
U	16.09	15.89	-41.03	54.61	1667	(1200	22 MAR 87)
V	-7.75	14.47	-42.75	29.76	1667		22 MAR 87)
${f T}$	2.67	0.19	1.63 822.35	3.26	1674		24 MAR 87)
P	1076.46	230.89	822.35	1974.44	1633		24 MAR 87)
S	34.49	2.27	34.24	34.88	1602	•	24 MAR 87)
	51415	2.27	54.24	34.00	1002	(0000	24 MAR 07)
15	OOM TA MOS	RING 6.	0600 30 JAI	N 86 - 0600	24 MAR	87. TA	PE 4578/5.
U	11.53	11.99	-26.29	49.76	1673	(0600	24 MAR 87)
V	-5.93	11.22		24.92			24 MAR 87)
Ť	2 50	0.25	1 01	2 07	1673	(0600 /	24 MAR 87)
P	1863 30	255 97	1597.24	2124 07	1673	(0600 /	
s	34.78	3.50	34.60	24.97	1673	(0600)	24 MAR 87)
3	34.70	3.50	34.60	34.90	1673	(0600)	24 MAR 87)
23:	30M AT MOC	RING 6.	0000 30 JAI	N 86 - 0600	28 MAR	86 TAP	E 4581/5.
U	2 97	2 97	-15.54	21 44	230	(0600	28 MAR 86)
	-2 OF	0.50	-30.95	6 00			
T	-0.05	9.58	-30.95	6.80	230	(0600	28 MAR 86)
T	2.01	0.41	1.22	2.66	230	(0600 :	28 MAR 86)
P			2358.16		230	(0600 2	28 MAR 86)
S	34.77	2.17	34.72	34.84	230	(0600 2	28 MAR 86)
338	85M AT MOO	RING 6.	0000 30 JA	N 86 - 0600	24 MAR	87 TAP	E 1539/38
U	4.07	9 97	-30.38	31 37	1510	(0600 :	24 MAR 87)
v	-5 50	10 56	-40.54	20 26			
Ť							24 MAR 87)
P	2601 27	172 42	0.31 3436.42	1.55	1674		24 MAR 87)
P	3601.27	1/2.43	3436.42	4584.43	1674	(0600 2	24 MAR 87)
43	85M AT MOO	RING 6.	0000 30 JA	N 86 - 0600	24 MAR	87. TA	PE 5330/11.
U	2.38	8.93	-27.05	30.37	1641	(0000	16 MAR 87)
V	-6.08	9.45	-38.37	23.49	1641	(0000	16 MAR 87)
T		0.08		0.86			24 MAR 87)
58:	15M AT MOO	RING 6.	0000 30 JA	1 86 - 0600	24 MAR	87. TAI	PE 7407/5.
**	0.45						
U	0.47	9.87		31.61			24 MAR 87)
V		11.55		31.34			
T	0.26	0.03	0.14	0.31	1674		24 MAR 87)
Sne	ad 11 and		iran in am/a				•

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

MOORING 6. LLP FILTERED DATA

- (810 M) BRIDGES IN UNFILTERED SPEED RECORD.

 SPEED TERMINATED EARLY IN UNFILTERED RECORD,

 LLP U & V RECORDS TERMINATED LINE

 1668 (1800 23 MAR 87)

 PRESSURE OFFSCALE, GAPS IN UNFILTERED RECORD,

 LLP GAPS LINES:

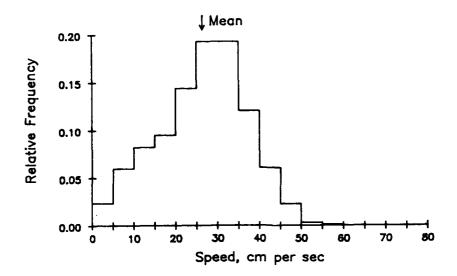
 379 392 (1200 4 MAY 86 1800 7 MAY 86)

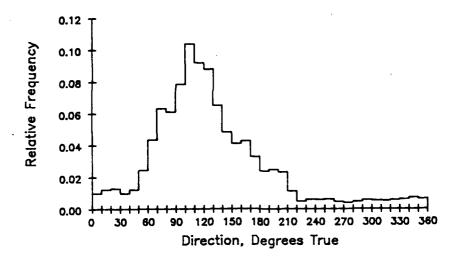
 823 834 (1200 23 AUG 86 0600 26 AUG 86)

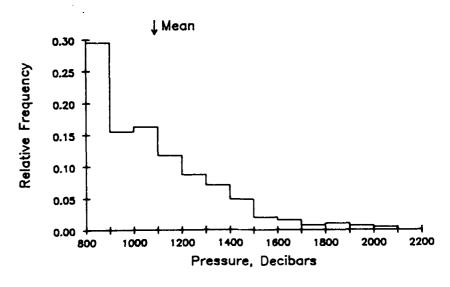
 1143 1157 (1200 11 NOV 86 0000 15 NOV 86)

 GAPS IN SALINITY RECORD, BAD VALUES REMOVED
- (1580 M) BRIDGE IN UNFILTERED SPEED RECORD.
- (2330 M) INSTRUMENT DESTROYED BY FLOODING, SHORT RECORD.
- (3385 M) SPEED AND DIRECTION GAPS IN UNFILTERED RECORD, LLP GAPS IN U AND V LINES: 1098 - 1261 (0600 31 OCT 86 - 0000 11 DEC 86)
- (4385 M) DIRECTION GAPS IN UNFILTERED RECORD, U AND V TERMINATED IN FILTERED RECORD AT LINE 1642 (0600 16 MAR 86)

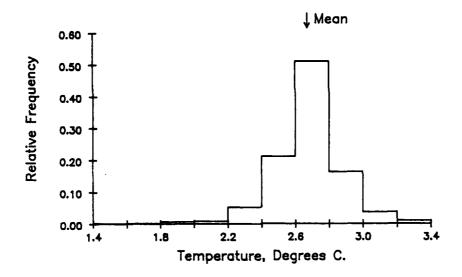
810 METERS AT MOORING 6. TAPE 7165/12.

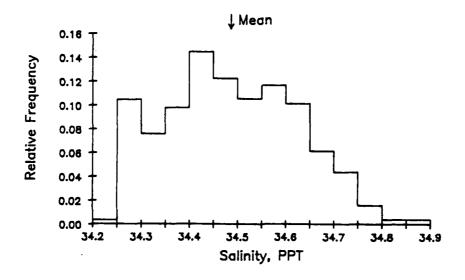




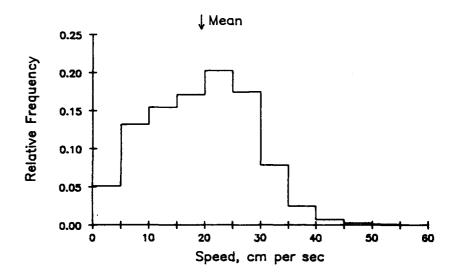


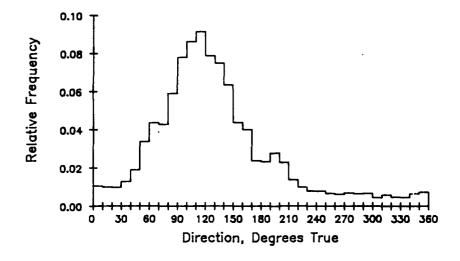
810 METERS AT MOORING 6. TAPE 7165/12.

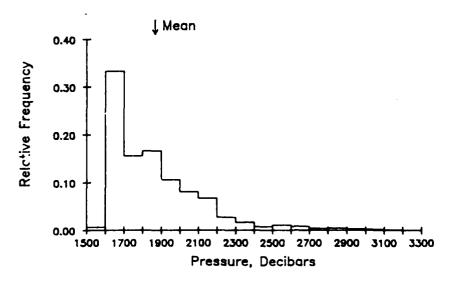




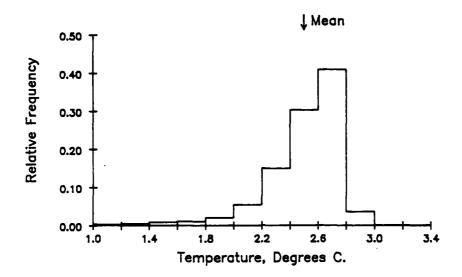
1580 METERS AT MOORING 6. TAPE 4578/5.

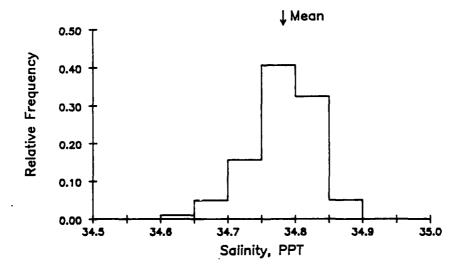




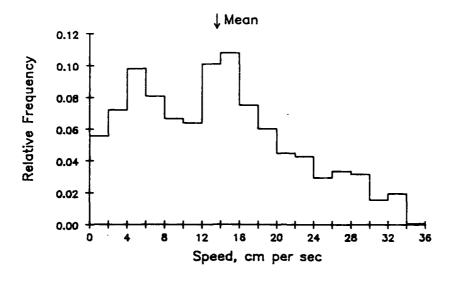


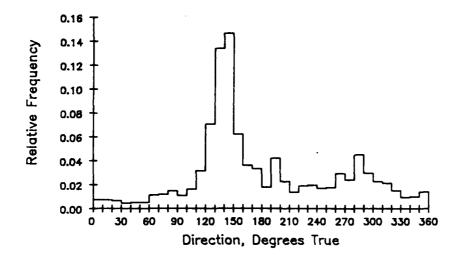
1580 METERS AT MOORING 6. TAPE 4578/5.

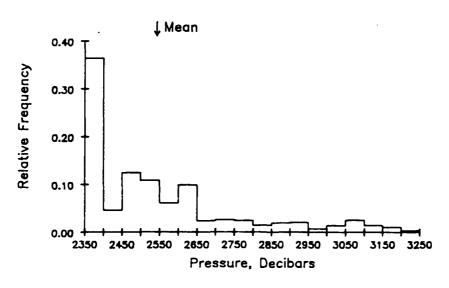




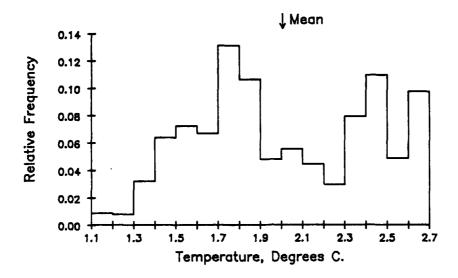
2330 METERS AT MOORING 6. TAPE 4581/5.

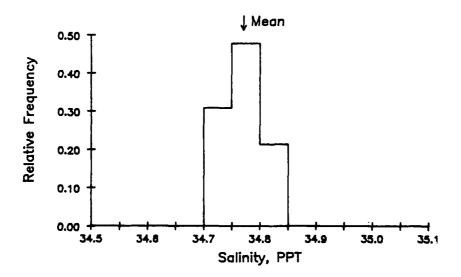




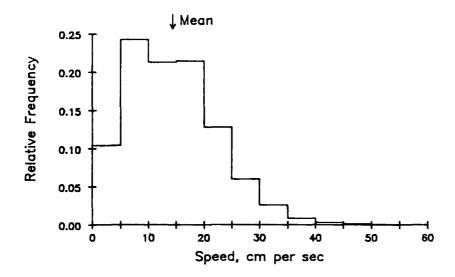


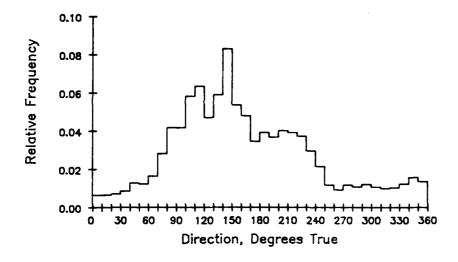
2330 METERS AT MOORING 6. TAPE 4581/5.

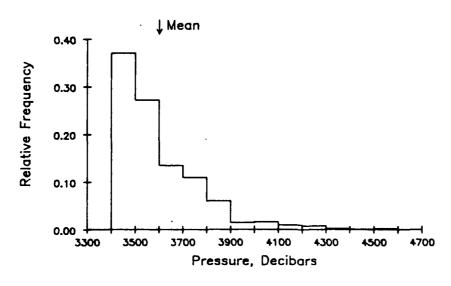




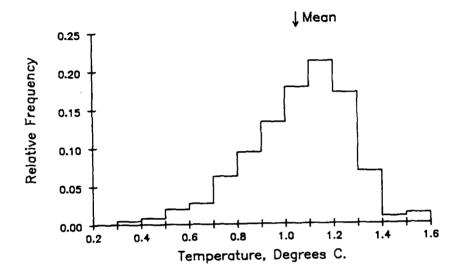
3385 METERS AT MOORING 6. TAPE 1539/38.



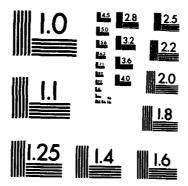




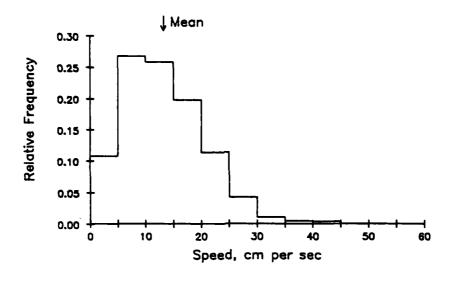
3385 METERS AT MOORING 6. TAPE 1539/38.

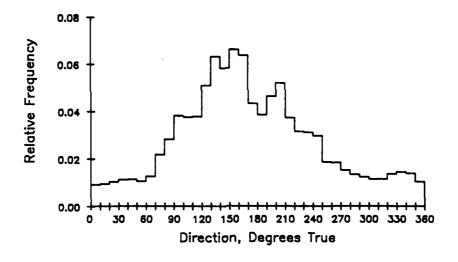


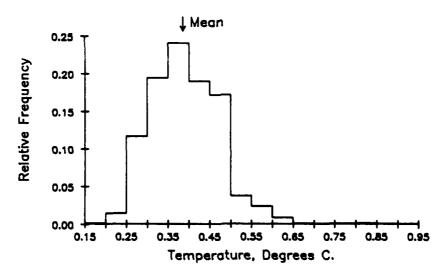
ABYSSAL BOUNDARY CURRENT STUDIES CURRENT HEASUREMENTS - 3/5.
NORTH OF THE FALKLAND PLATEAU JANUARY 1986-1987(U)
OREGON STATE UNIV CORUALLIS COLL OF OCEANOGRAPHY
R D PILLSBURY ET AL. SEP 89 DR-147 XN-ONR NL AD-A252 733 UNCLASSIFIED



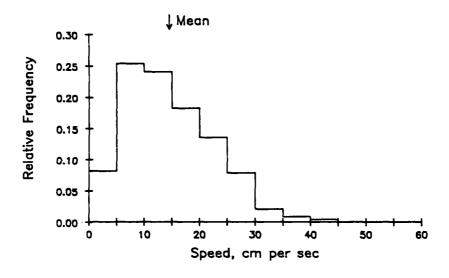
MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS STANDARD REFERENCE MATERIAL 1010a (ANSI and ISO TEST CHART No. 2) 4385 METERS AT MOORING 6. TAPE 5330/11.

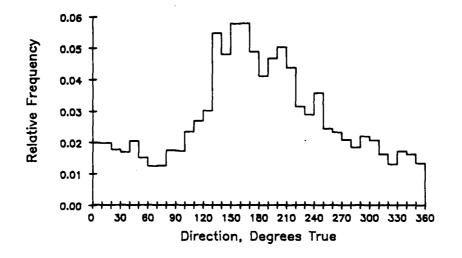


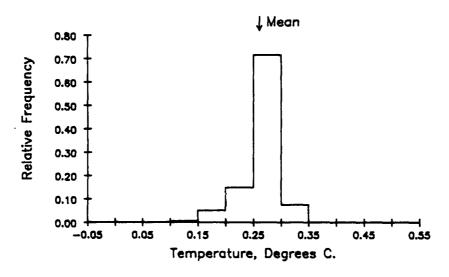




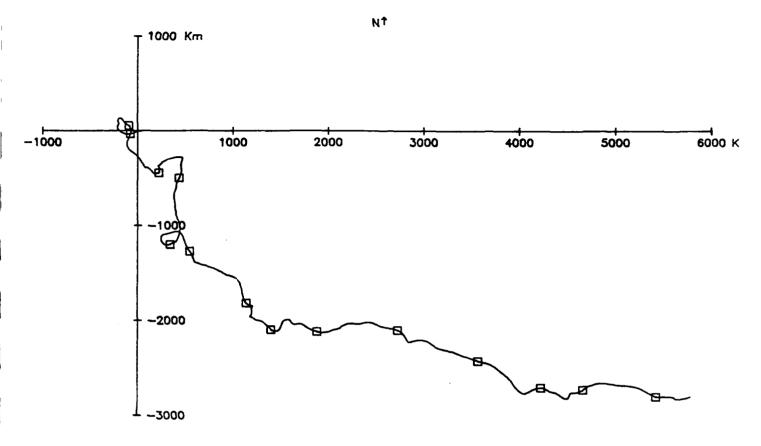
5815 METERS AT MOORING 6. TAPE 7407/5.

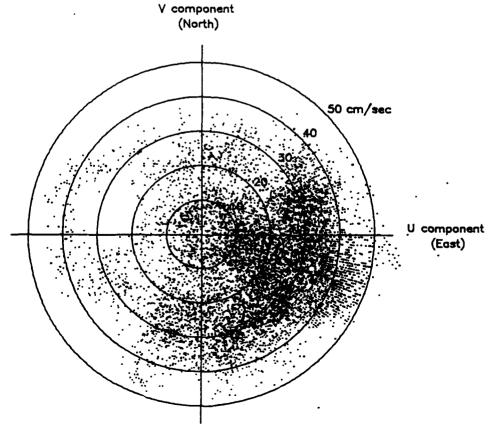




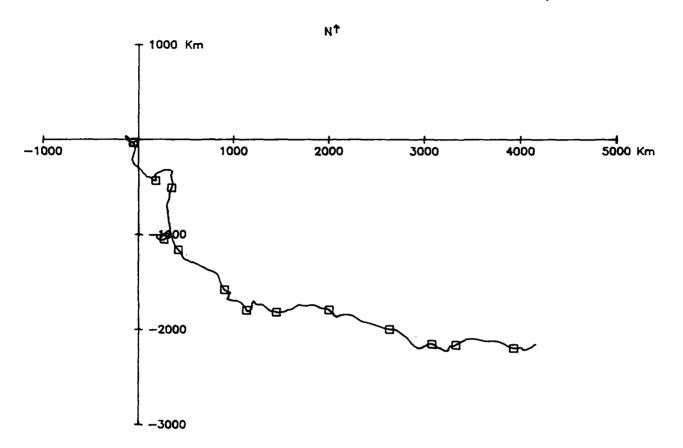


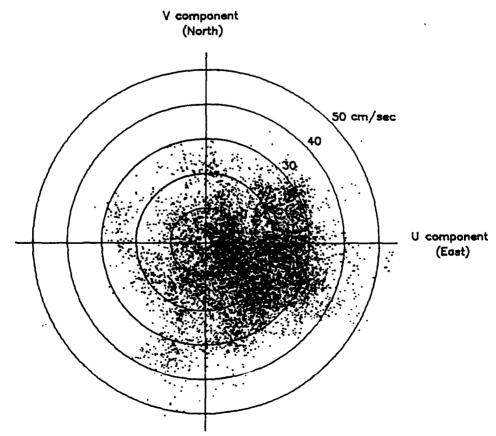
810M AT MOORING 6. 29 JAN 86 - 23 MAR 87. TAPE 7165/12.



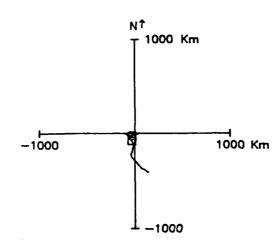


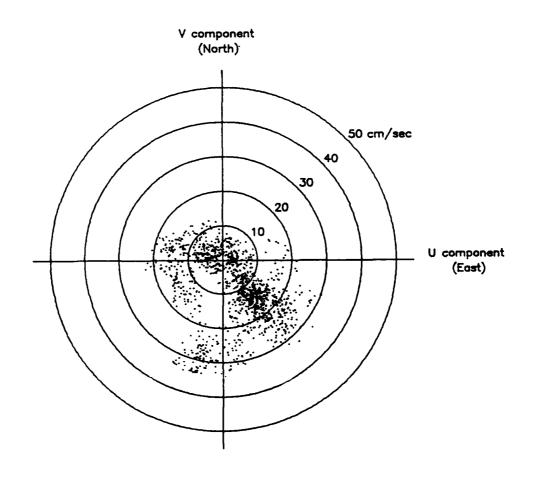
1580M AT MOORING 6. 29 JAN 86 - 25 MAR 87. TAPE 4578/5.



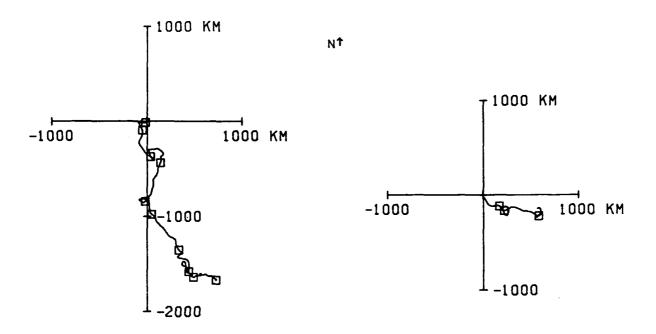


2330M AT MOORING 6. 29 JAN 86 - 29 MAR 86. TAPE 4581/5.



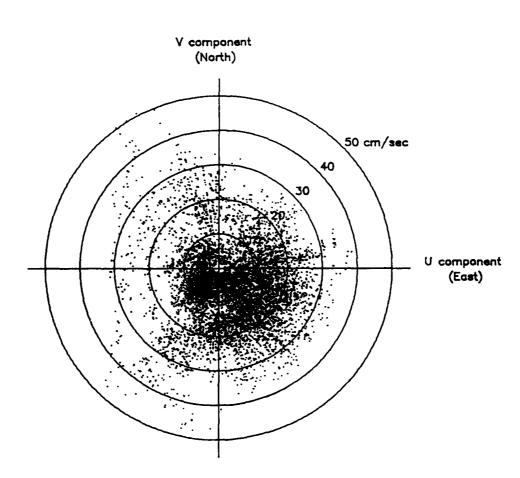


3385M AT MOORING 6. 29 JAN 86 - 25 MAR 87. TAPE 1539/38.

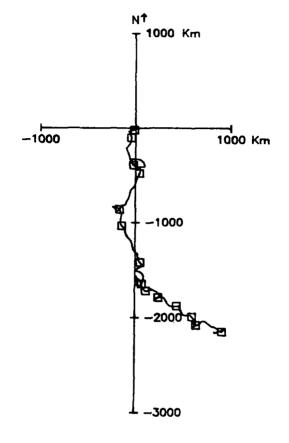


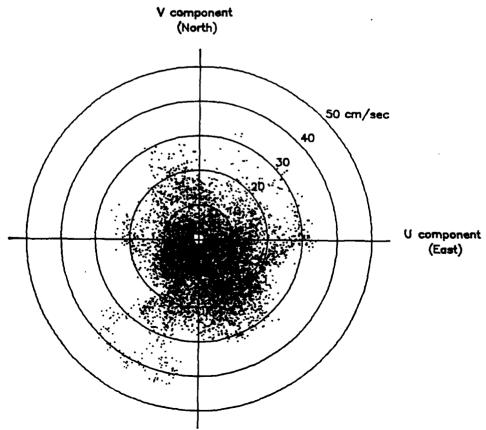
10 DEC 86 - 25 MAR 87.

29 JAN 86 - 1 NOV 86.

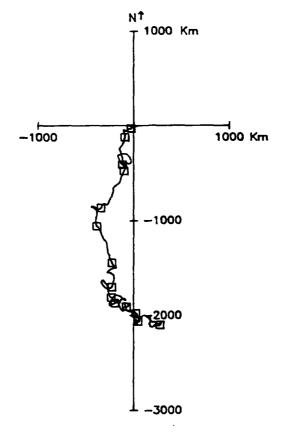


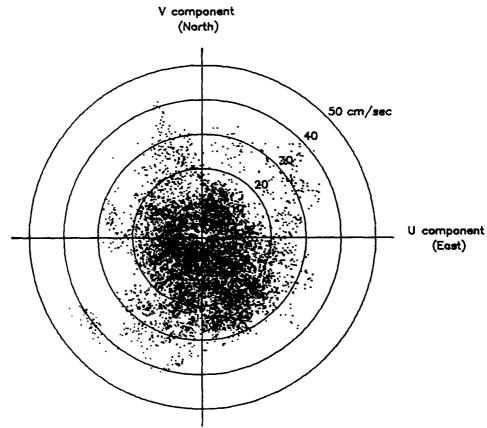
4385M AT MOORING 6. 29 JAN 86 - 17 MAR 87. TAPE 5330/11.



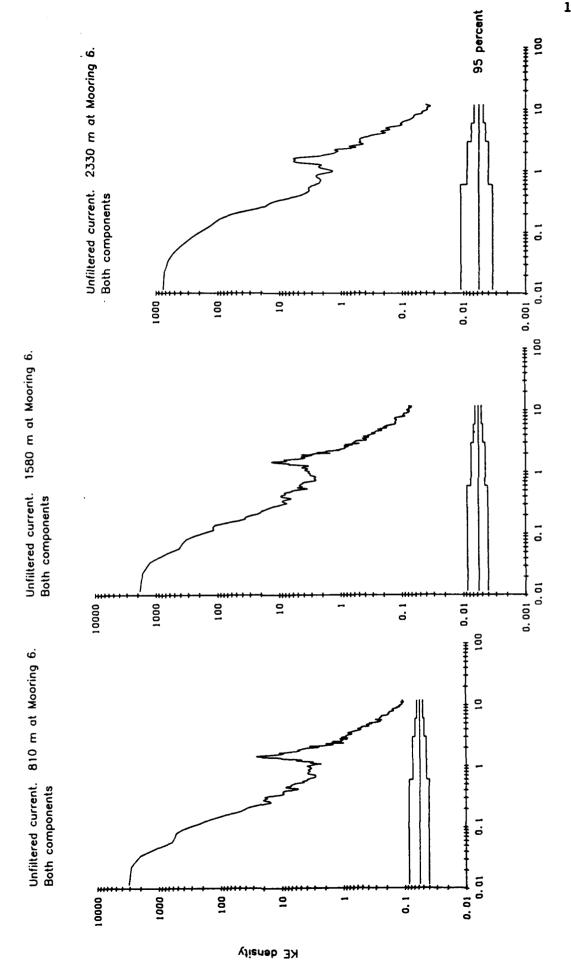


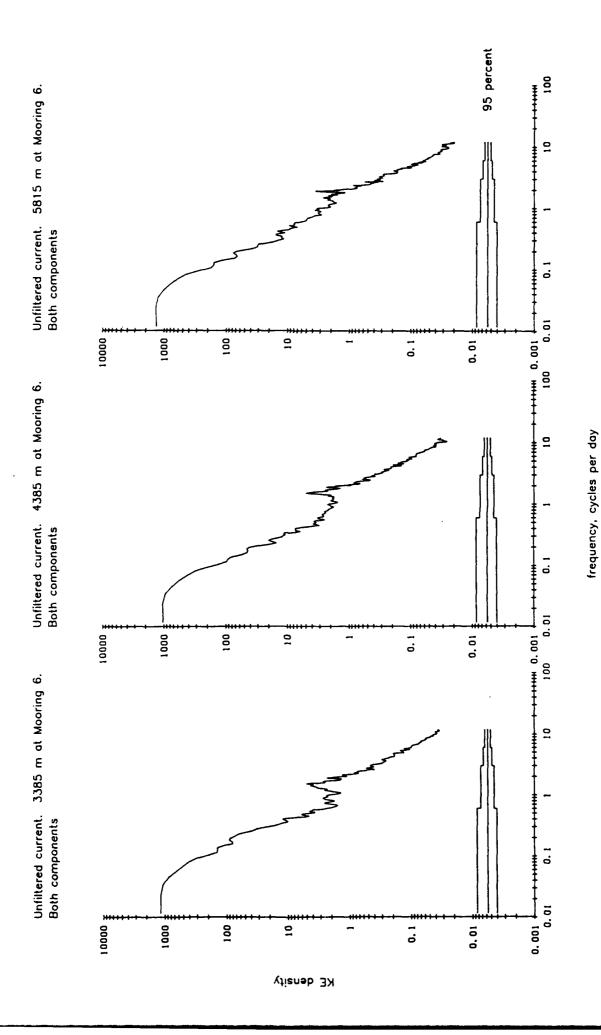
5815M AT MOORING 6. 29 JAN 86 - 25 MAR 87. TAPE 7407/5.



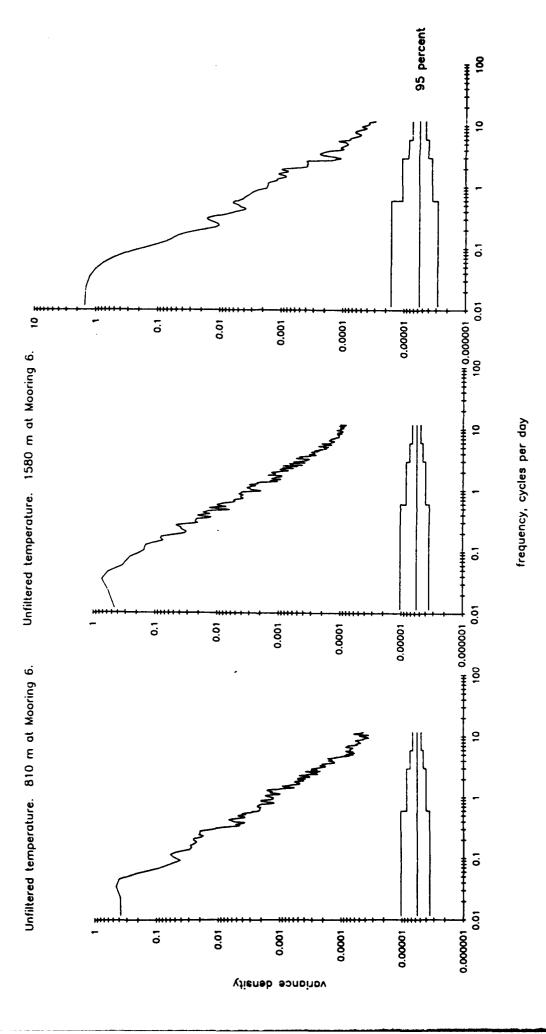


frequency, cycles per day



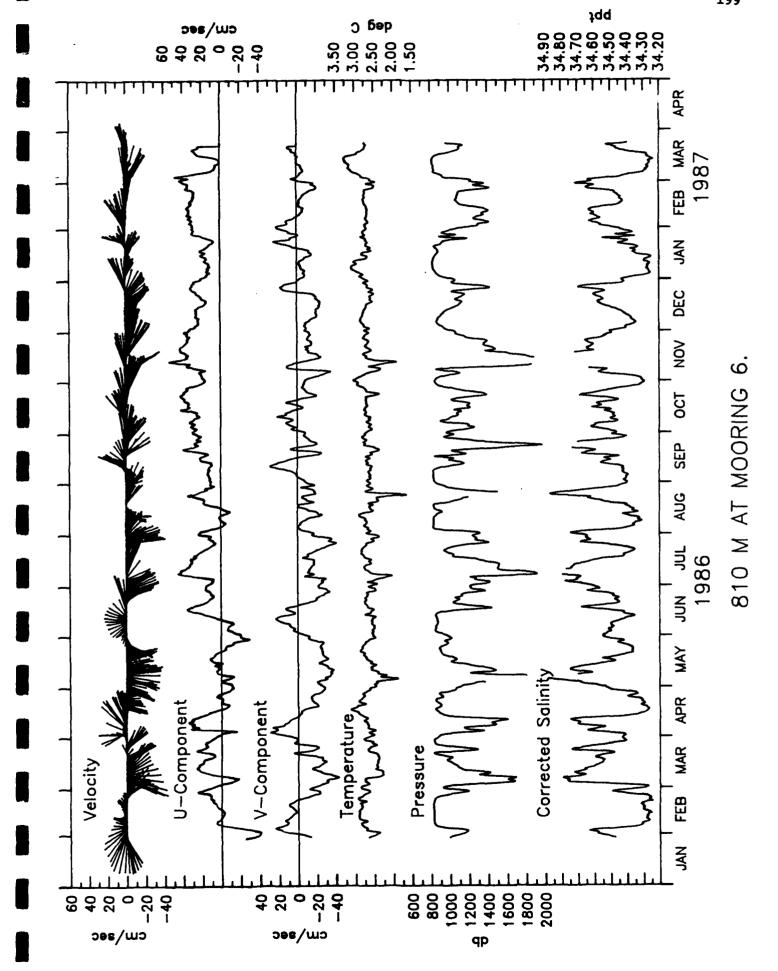


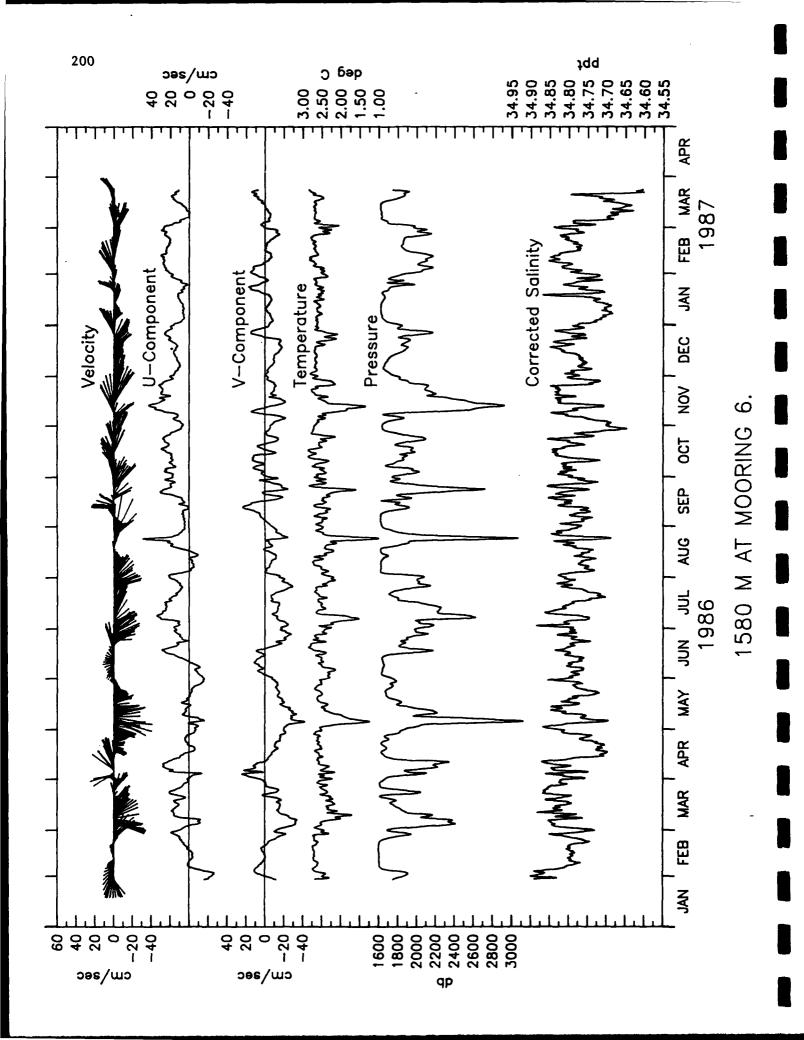
Unfiltered temperature. 2330 m at Mooring 6.

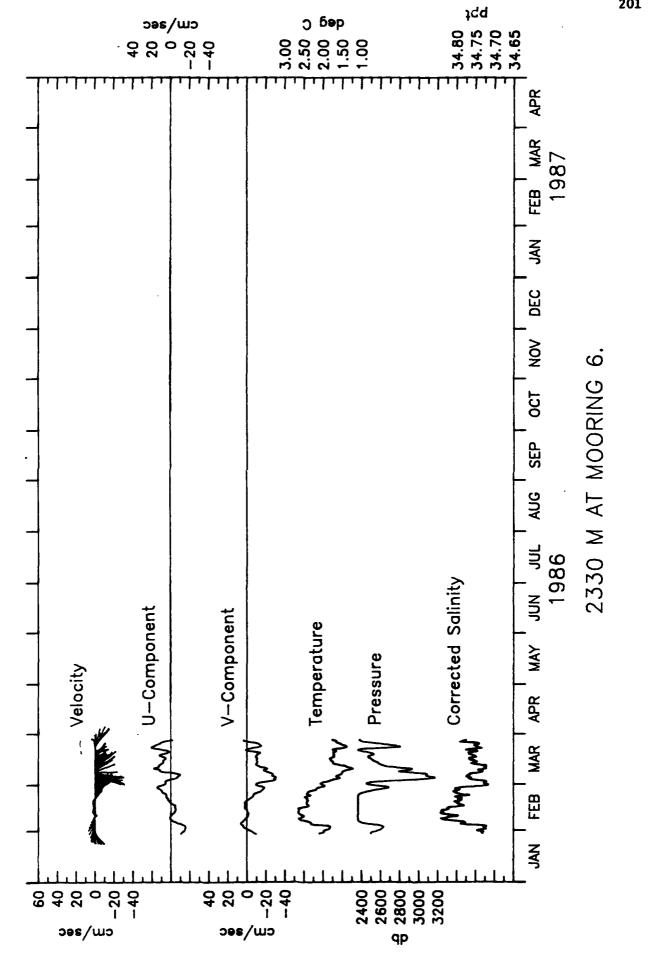


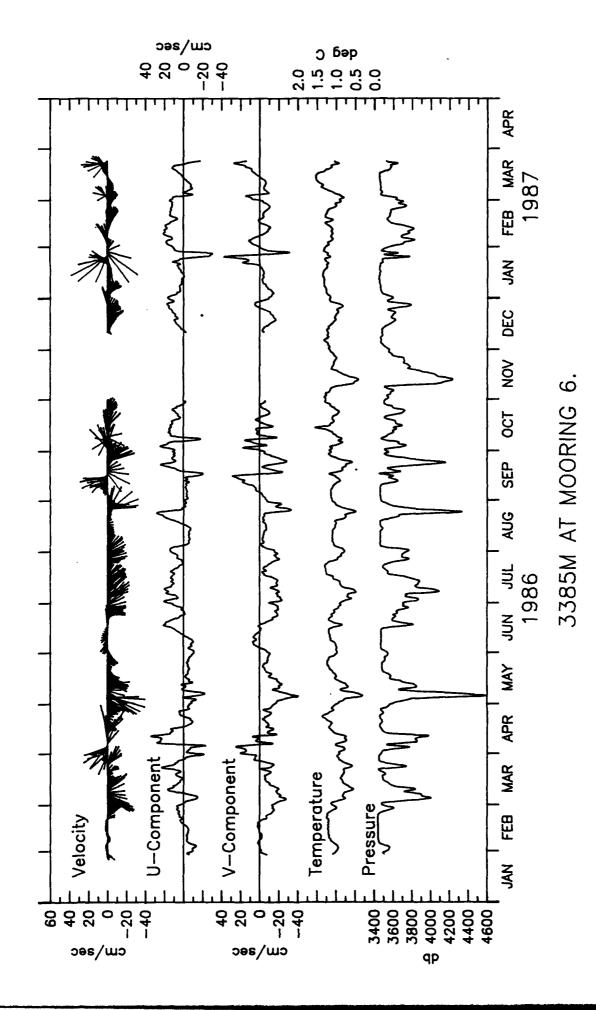
95 percent Unfiltered temperature. 5815 m at Mooring 6. **5** <u>.</u> 0.01 0.0001 100000001 0.001 0.0 0.00001 0.000001 Unfiltered temperature. 4385 m at Mooring 6. 10 9. 0.01 0.00001 0. 0.0001 100 0.0000001 0.01 0.001 Unfiltered temperature. 3385 m at Mooring 6. 9 <u>.</u> 0.0 0.000001 0.00001 . . 0.0 0.001 0.0001 variance density

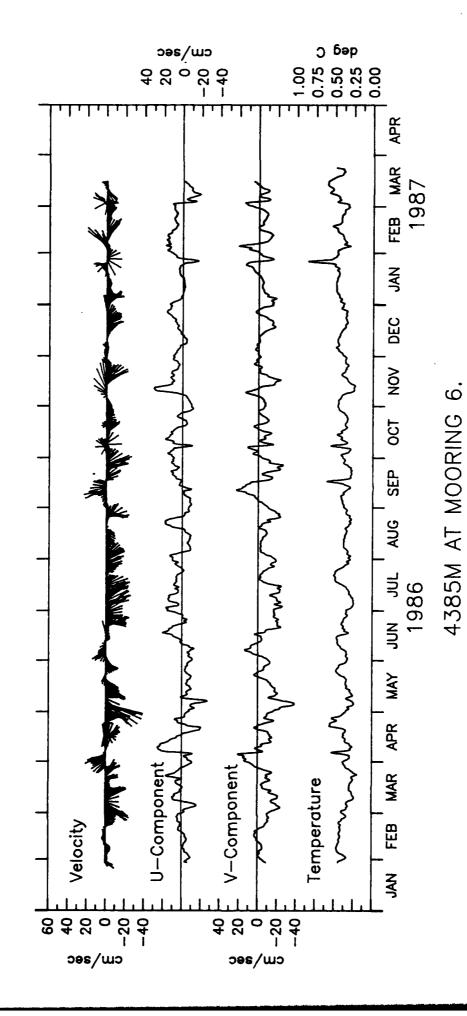
frequency, cycles per day

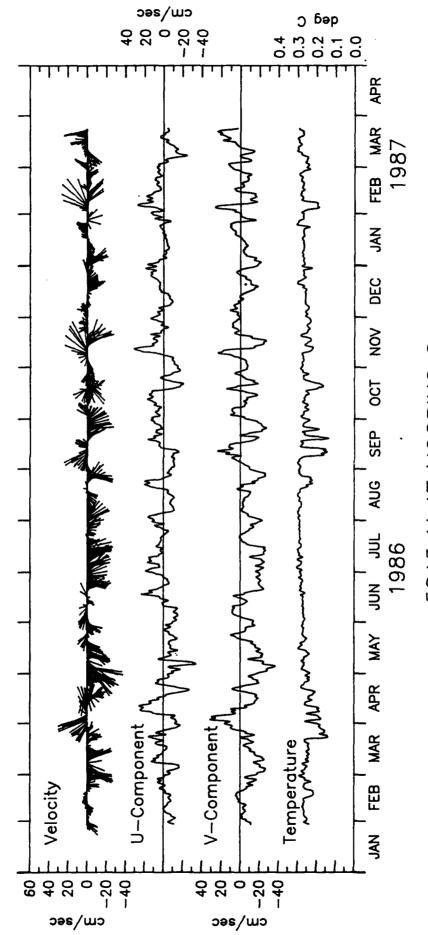




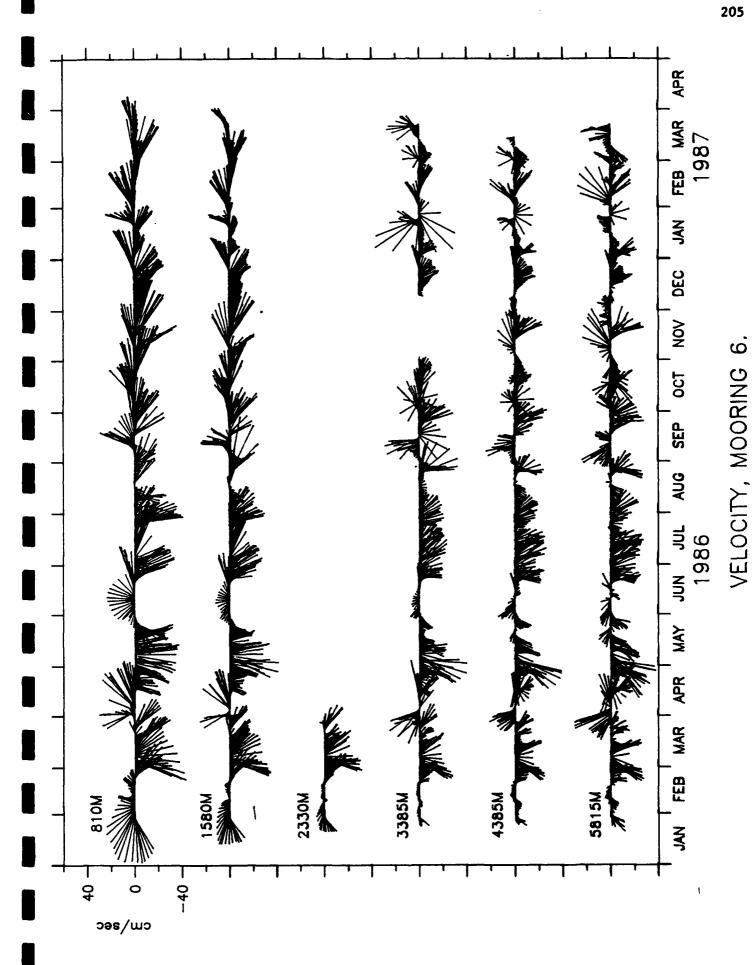


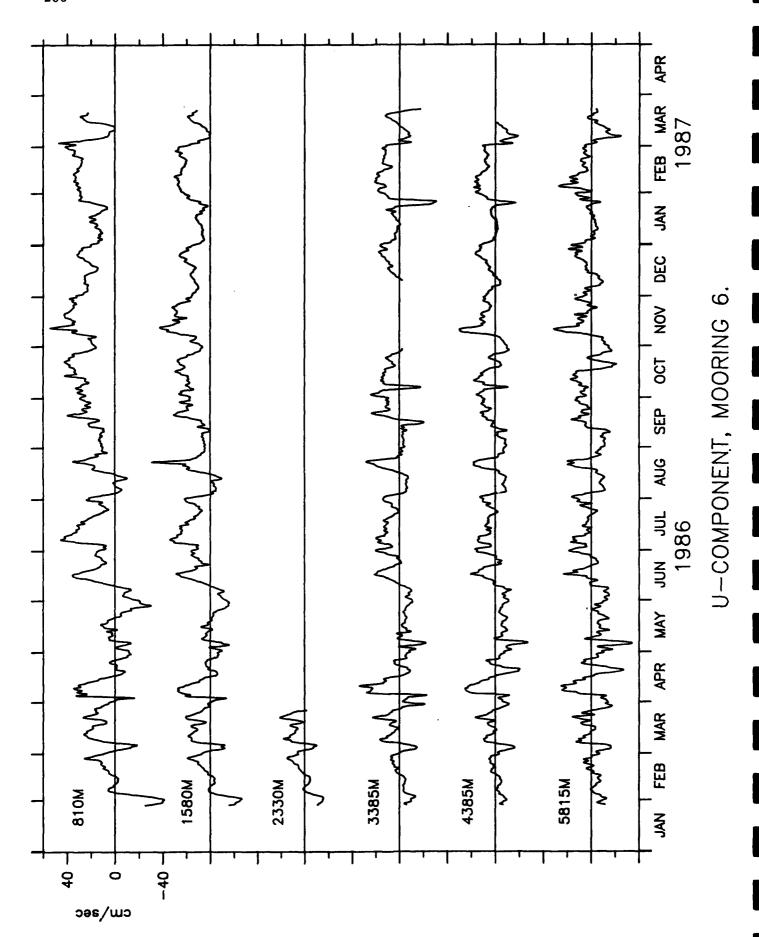


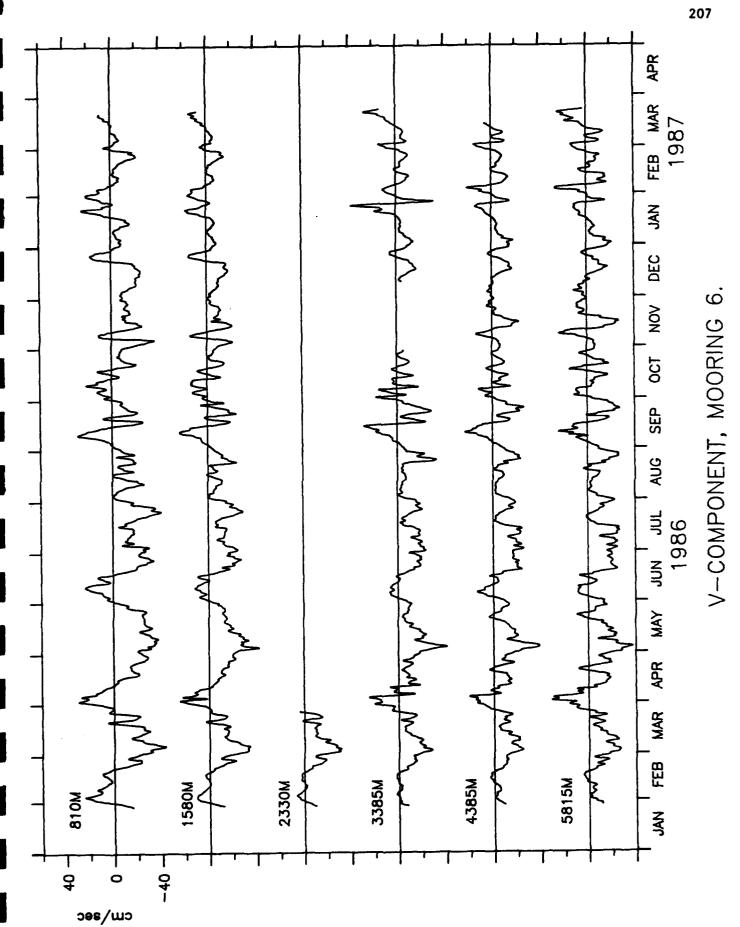


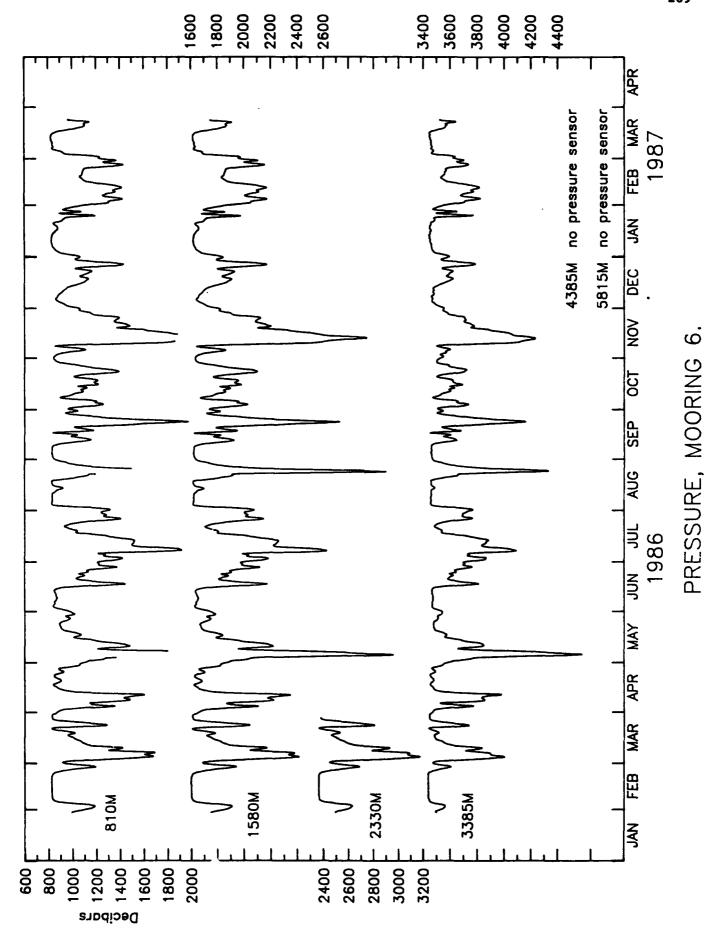


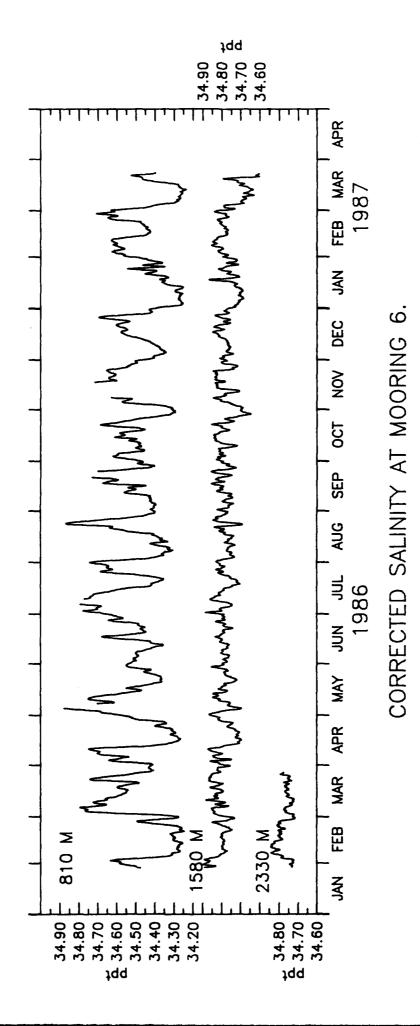
5815 M AT MOORING 6.





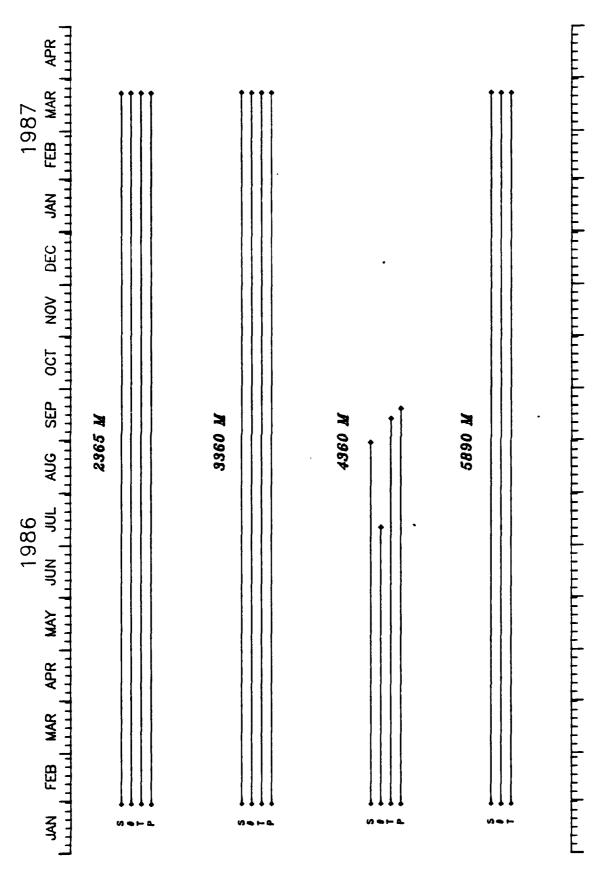






MOORING 7

47°28.90'S, 41°13.60'W



DATA RETURN FROM MOORING 7.

MOORING 7. UNFILTERED HOURLY DATA.

2365M AT MOORING 7. 0800 29 JAN 86 - 0900 24 MAR 87. TAPE 7209/11. MAX LENGTH ENDS AT MEAN SD MIN 13.03 8.09 0.80 43.10 10058 (0900 24 MAR 87) U 10058 (0900 24 MAR 87) 7.26 9.10 -25.4039.90 V -6.097.90 -39.7030.70 10058 (0900 24 MAR 87) T 2.36 0.31 0.75 10058 (0900 24 MAR 87) 2.94 P 3488.00 10058 (0900 24 MAR 87) 2473.86 133.08 2394.10 3360M AT MOORING 7. 0800 29 JAN 86 - 1500 24. MAR 87. TAPE 1540/40. S 11.28 7.45 0.80 48.70 10064 (1500 24 MAR 87) U 5.33 7.85 -17.90 10064 (1500 24 MAR 87) 41.40 V 8.00 10064 (1500 24 MAR 87) -5.37-47.3031.50 10064 T 1.26 0.23 0.33 1.82 (1500 24 MAR 87) P 3499.99 3412.00 (1500 24 MAR 87) 131.17 4382.00 10064 4360M AT MOORING 7. 0800 29 JAN 86 - 0400 20 SEP 86. TAPE 1542/44. S 12.49 9.02 0.80 40.50 5150 (2100 31 AUG 86) U 5.69 9.69 -21.50 34.60 3979 (0200 14 JUL 86) 8.74 ٧ 3979 -4.93-40.5025.40 (0200 14 JUL 86) 0.23 (1600 14 SEP 86) Т 0.09 0.71 5481 0.45 4538.51 (0400 20 SEP 86) 93.52 4437.00 5044.00 5613 5890M AT MOORING 7. 0800 29 JAN 86 - 0900 24 MAR 87. TAPE 7408/7. S 7.35 12.53 0.80 39.10 10058 (0900 24 MAR 87) 4.57 U 8.69 -25.9035.80 10058 (0900 24 MAR 87) 9.20 V -5.46-38.3028.80 10058 (0900 24 MAR 87) T 0.32 0.02 10058 0.17 0.37 (0900 24 MAR 87) (2365 M) SPEED BRIDGED, LINES:

- 6150 6226 (1300 12 OCT 86 1700 15 OCT 86)
- (3360 M) RECORD CONTAINS 6 EXTRA CYCLES, CLOCK PROBLEM, SPEED BRIDGED, LINES: 6796 ~ 6974 (1100 8 NOV 86 - 2100 15 NOV 86) 7984 -(2300 27 DEC 86 - 0600 1 JAN 87) 8087 8153 -8265 (0000 4 JAN 87 - 1600 8 JAN 87)
- (4360 M) SHORT RECORD DUE TO BATTERY FAILURE.
- (Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 7. LLP FILTERED 6-HOURLY DATA.

11.

250	JII HI MOO	KING /.	1200 30 JA	714 86 - 06	000 23 MA	IR 87.	TAPE /209/11.
	MEAN	SD	MIN	MAX	LENGTH	ENDS .	AT
U	7.26	8.71	-18.48	32.88	1668	(0600	23 MAR 87)
V	-6.07	7.52	-29.36	23.55	1668	(0600	23 MAR 87)
T	2.36	0.30	0.88	2.90	1660	10600	23 MAR 87)
P	2473.71	131.26	2393.69	3397.66	1668	(0600	23 MAR 87)
33	60M AT MO	ORING 7.	1200 30 Ј	AN 86 - 1	.200 23 M	AR 87.	TAPE 1540/40.
							•
U	5.32	7.46	-14.15	32.14	1669	(1200	23 MAR 87)
V	-5.35	/.64	-42.58	21.10	1669	(1200	22 MVD 021
${f T}$	1.26	0.23	0.35	1.79	1669	(1200	23 MAR 87)
P	3499.81	129.66	3414.92	4345.02	1669	(1200	23 MAR 87) 23 MAR 87) 23 MAR 87)
43	60M AT MOO	ORING 7.	1200 30 J	An 86 - 0	000 19 S	EP 86.	TAPE 1542/44
U	5.67	9.37	-18.01	31.85	655	(0600	13 JUL 86)
V	-4.78	8.37	-37.32	21.20	655	(0600	13 TIT 06)
T	0.45	0.09	0.25	0.67	905	(1800	13 CFD 06)
P	4538.58	92.08	4436.71	5047.50	927	(0000)	19 SEP 86)
V -4.78 8.37 -37.32 21.20 655 (0600 13 JUL 86) T 0.45 0.09 0.25 0.67 905 (1800 13 SEP 86) P 4538.58 92.08 4436.71 5047.50 927 (0000 19 SEP 86)							
589	90M AT MOC	ORING 7.	1200 30 Ј	AN 86 - 0	600 23 M	AR 87.	TAPE 7408/7.
U	4.57	8.48	-22.71	32.34	1668	(0600	23 MAR 87)
V	-5.46	9.00	-35.81	24.47	1668	(0600	23 MAR 87)
T	0.32	0.02	0.18	0.35	1668	(0600	23 MAR 87)
						,,,,,,	0,,

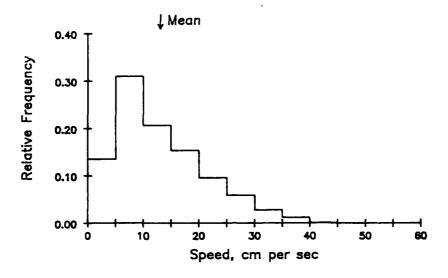
(2365 M) SPEED BRIDGED IN UNFILTERED RECORD.

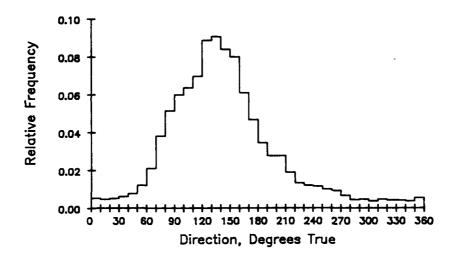
(3360 M) UNFILTERED RECORD CONTAINS 6 EXTRA CYCLES. SPEED BRIDGED IN UNFILTERED RECORD.

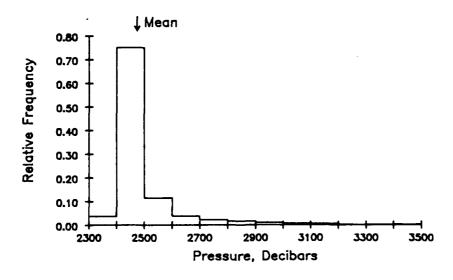
(4360 M) LOW BATTERY CAUSED SHORT RECORD.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

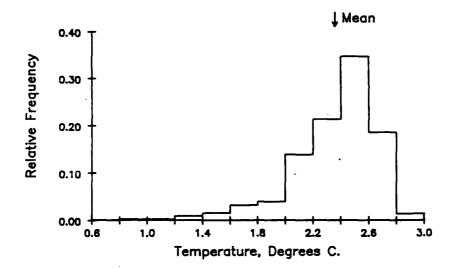
2365 METERS AT MOORING 7. TAPE 7209/11.



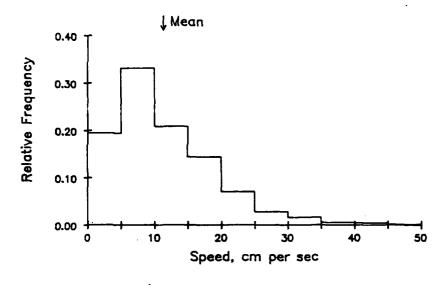


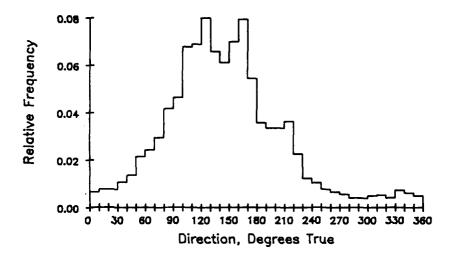


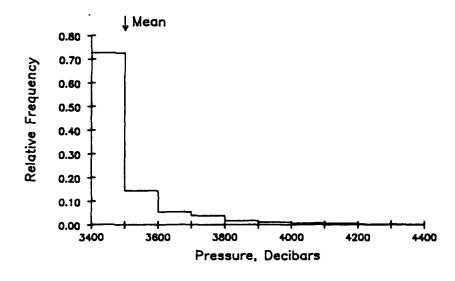
2365 METERS AT MOORING 7. TAPE 7209/11.



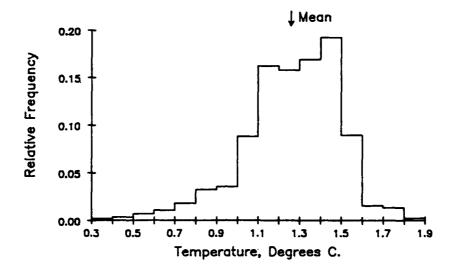
3360 METERS AT MOORING 7. TAPE 1540/40.



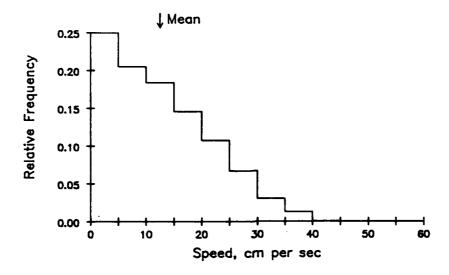


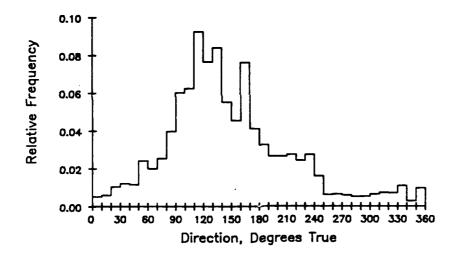


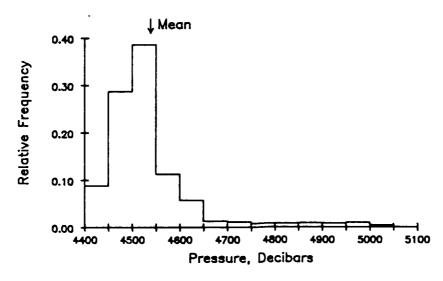
3360 METERS AT MOORING 7. TAPE 1540/40.



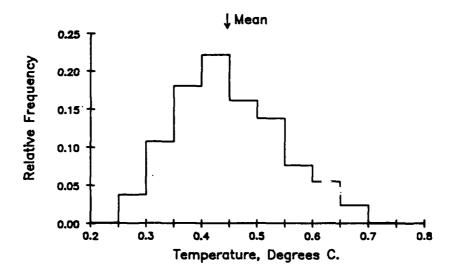
4360 METERS AT MOORING 7. TAPE 1542/44.



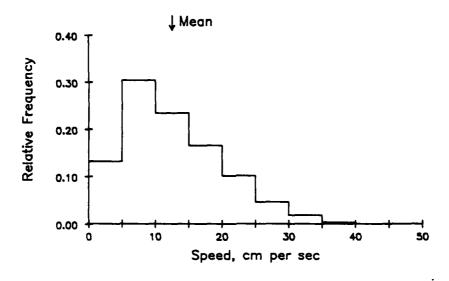


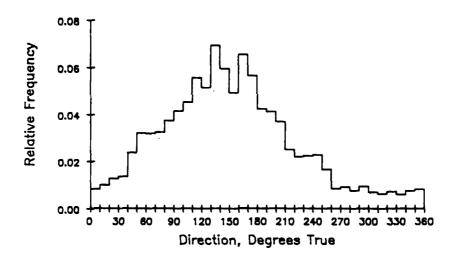


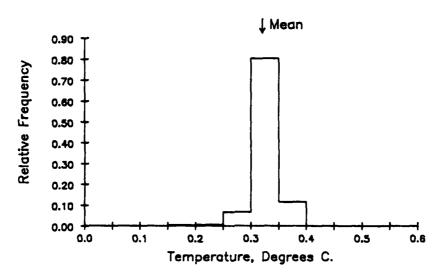
4360 METERS AT MOORING 7. TAPE 1542/44.



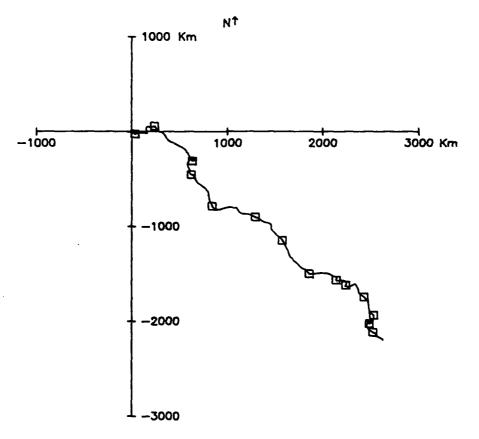
5890 METERS AT MOORING 7. TAPE 7408/7.

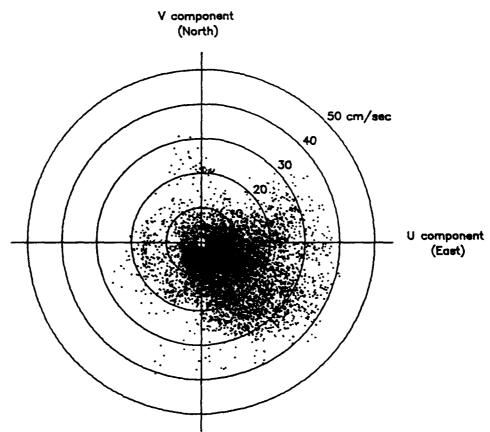




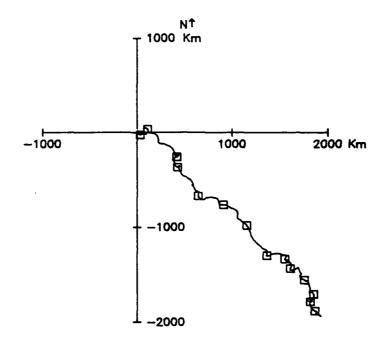


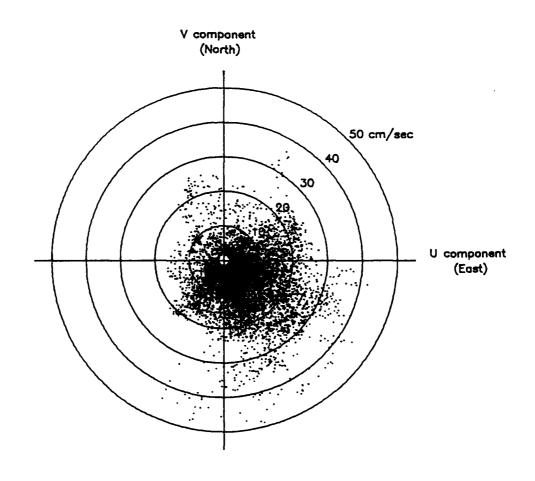
2365M AT MOORING 7. 29 JAN 86 - 24 MAR 87. TAPE 7209/11.

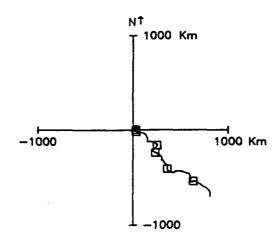


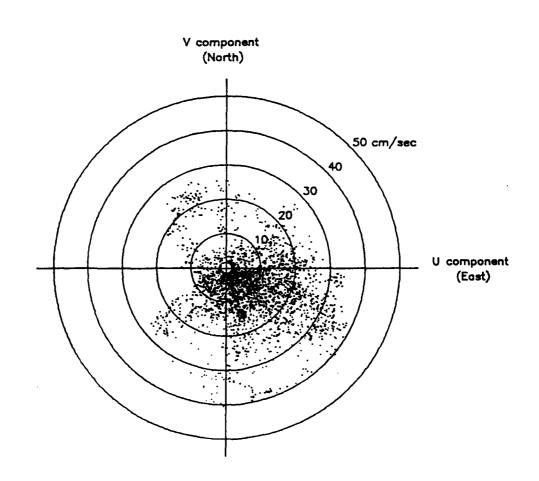


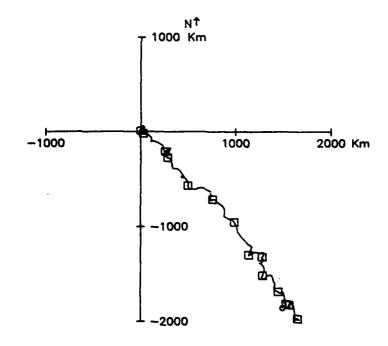
3360M AT MOORING 7. 29 JAN 86 - 24 MAR 87. TAPE 1540/40.

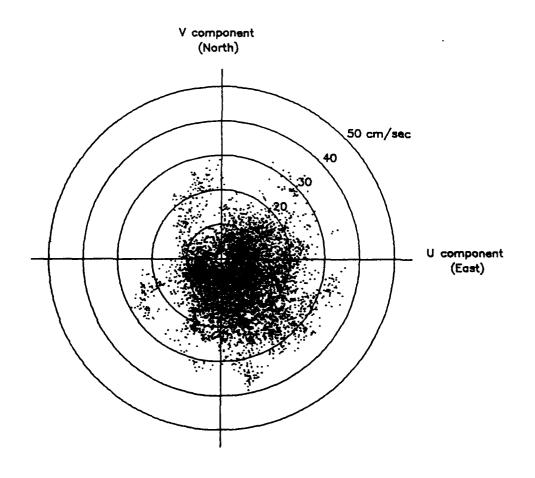


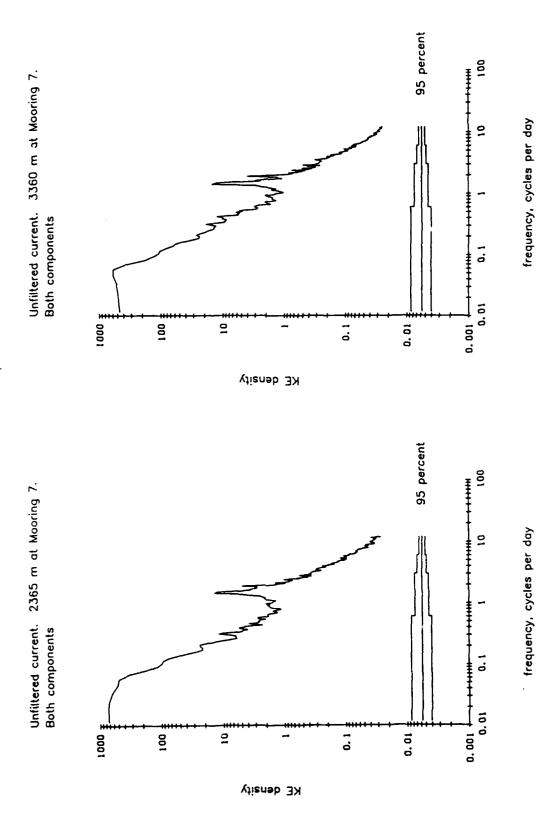






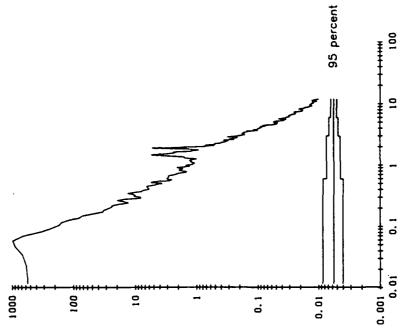




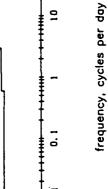




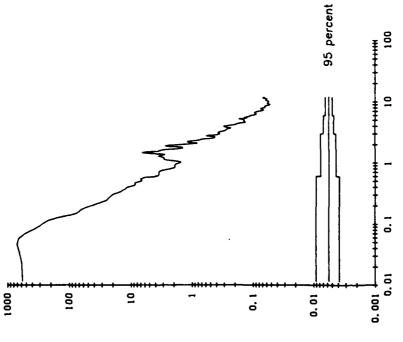
Unfiltered current. 5890 m at Mooring 7. Both components



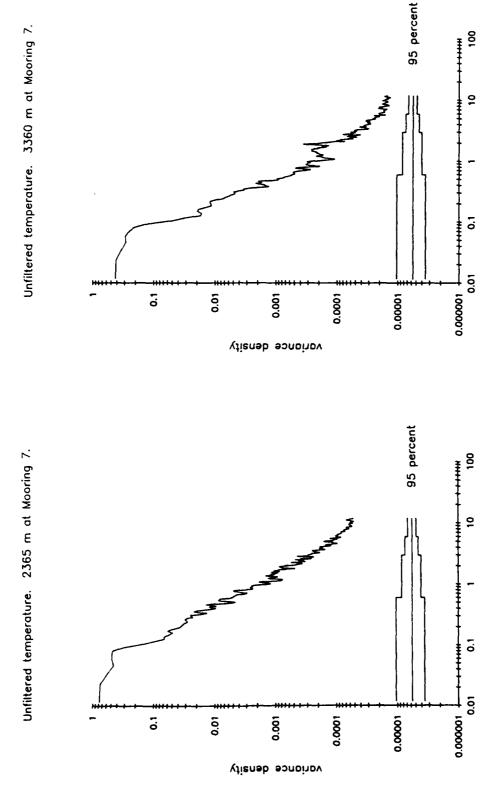
KE density



frequency, cycles per day



KE density

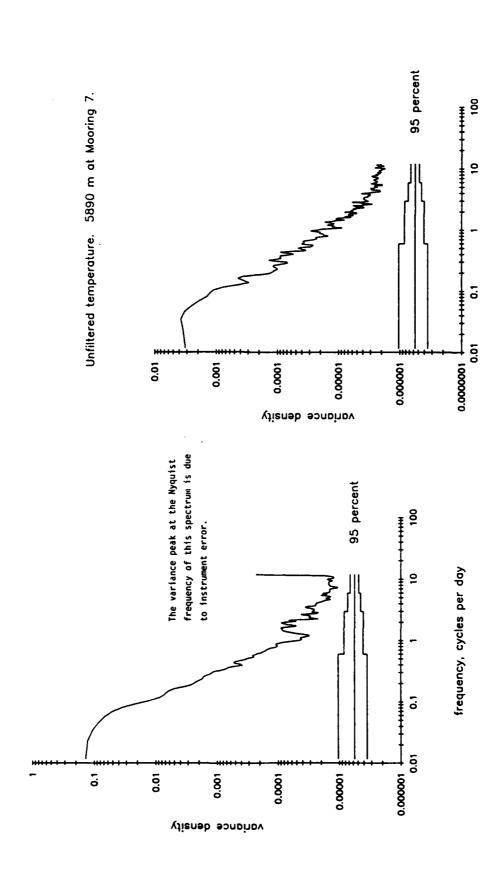


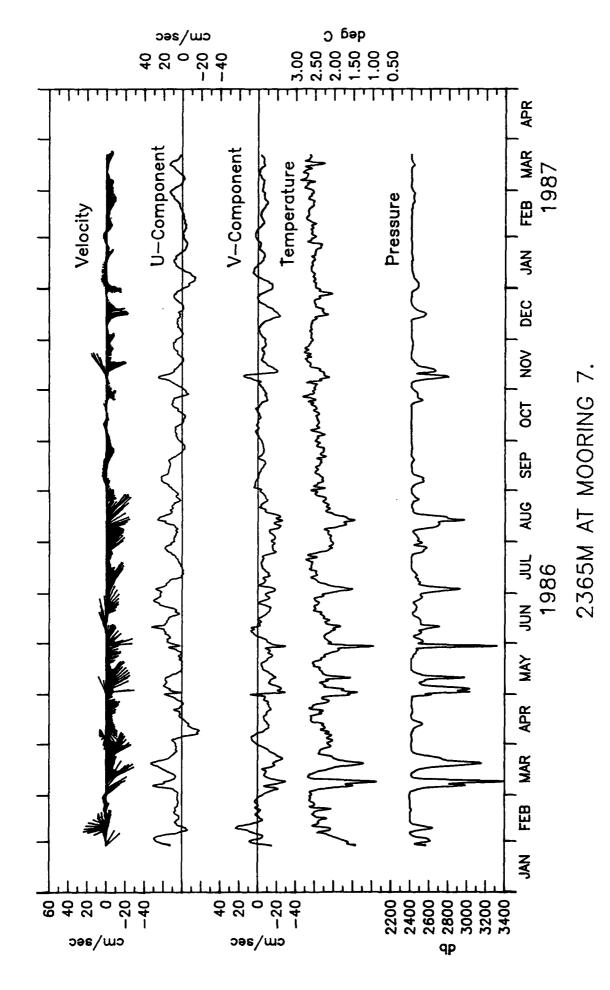
frequency, cycles per day

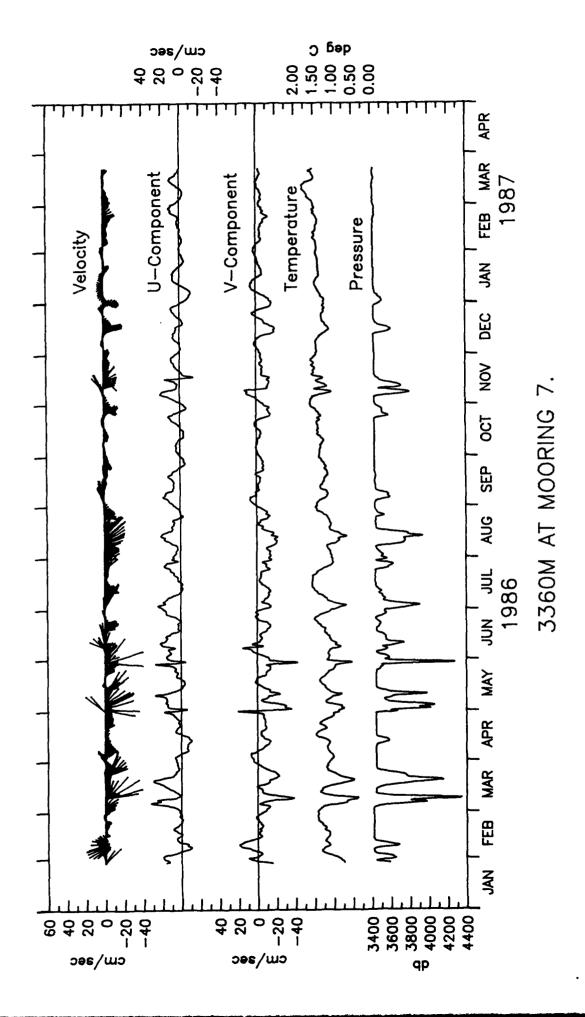
frequency, cycles per day

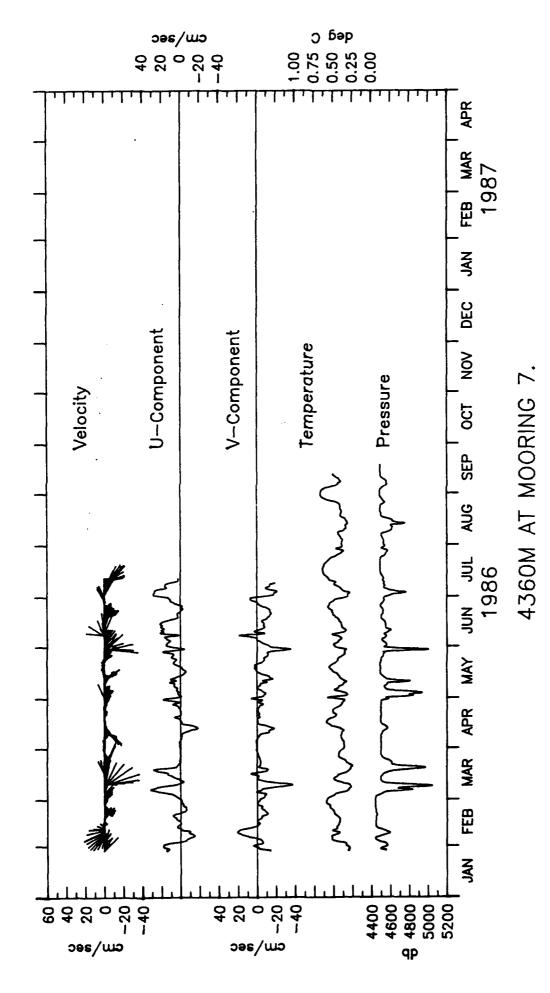
frequency, cycles per day

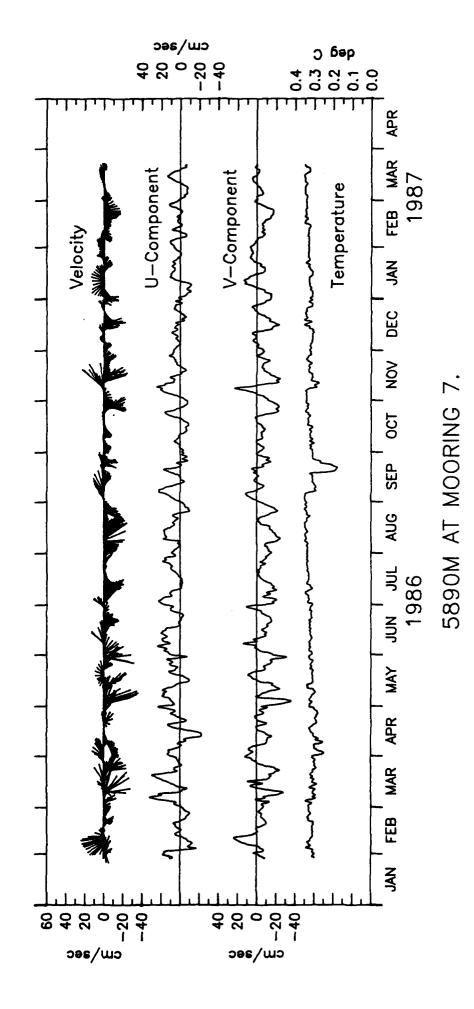
Unfiltered temperature. 4360 m at Mooring 7.

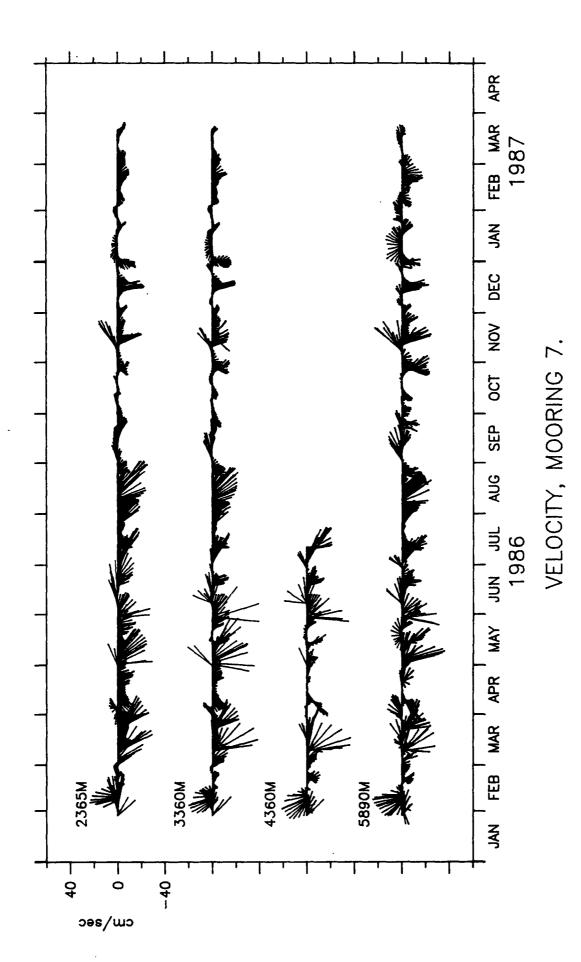


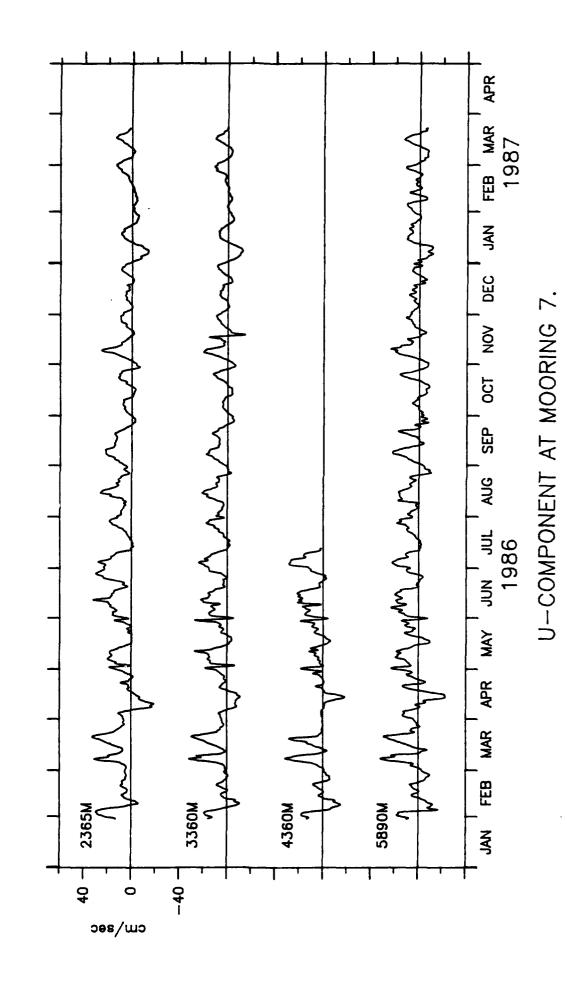


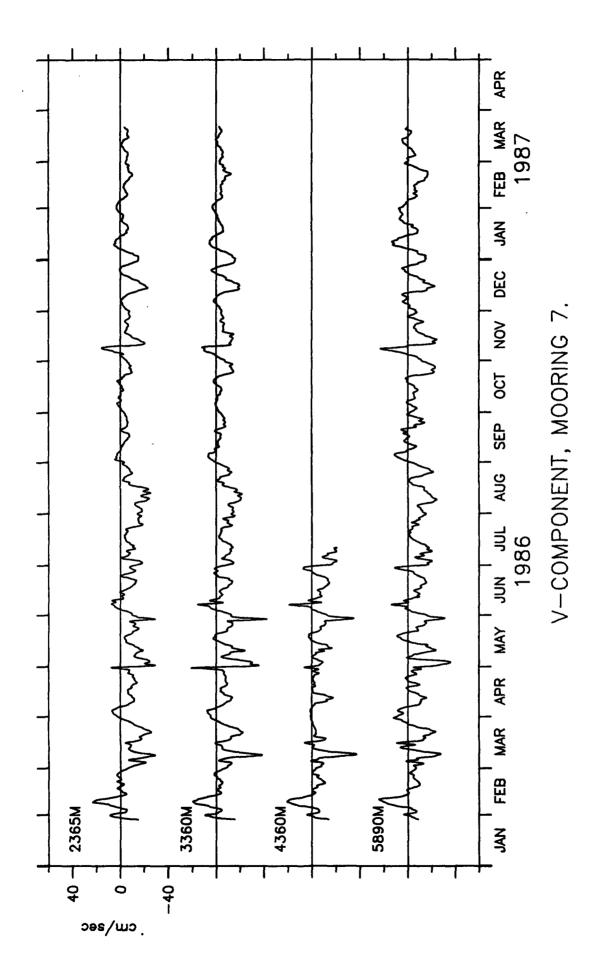


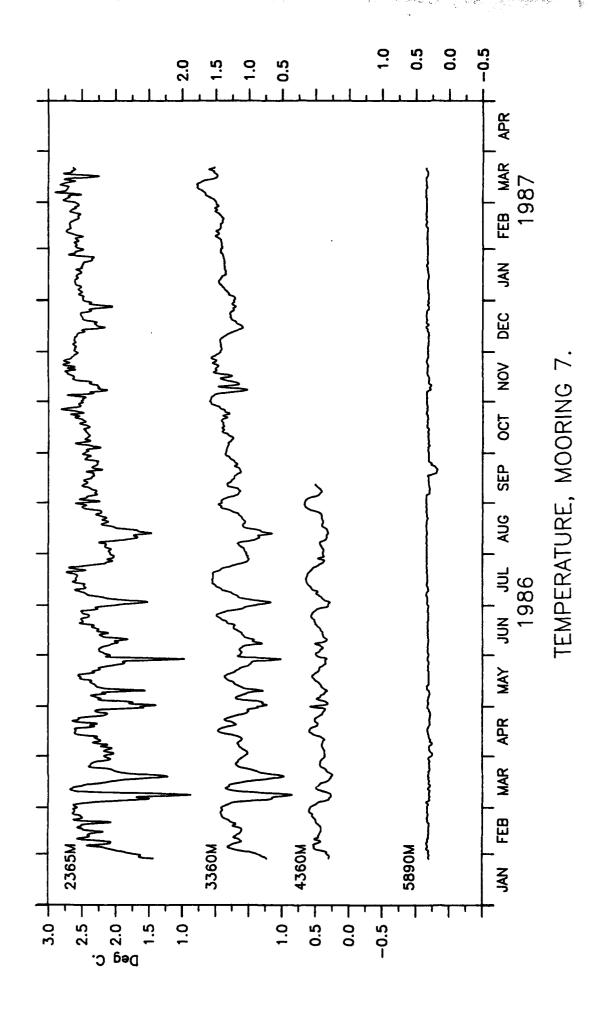


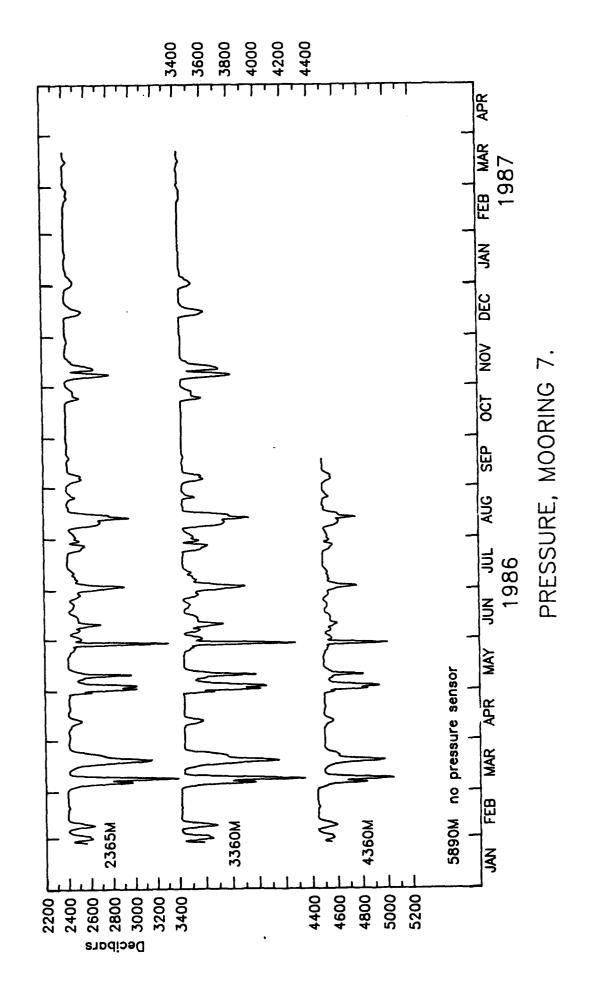






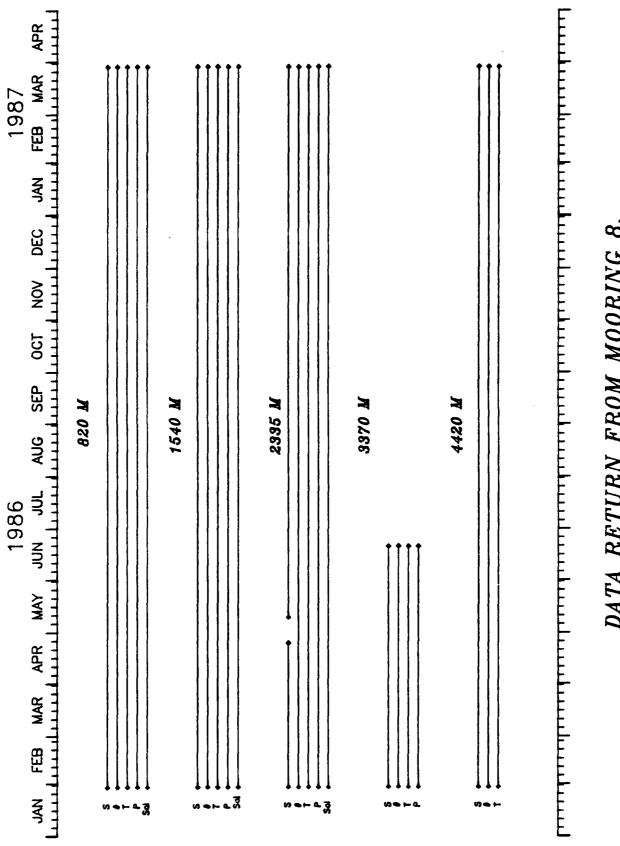






MOORING 8

49°23.14'S, 38°42.53'W



DATA RETURN FROM MOORING 8.

MOORING 8. UNFILTERED HOURLY DATA

820M AT MOORING 8. 1900 30 JAN 86 - 1300 30 MAR 87. TAPE 7210/12.

-							
	MEAN	SD	MIN	MAX	LENGTH	ENDS A	ΛT
s	21.63	11.91	0.80	60.30	10171	(1300	30 MAR 87)
บ		16.13	-29.20	55.00	10171 10171 10171		30 MAR 87)
v	-3 58	13 25	-29.20 -45.80	39.00	10171	(1300	30 MAR 87)
Tr.	2 11	0.20	1 60	2 76	10171	(1300	30 MAP 87)
T	2.11	0.20	1.68 829.20	1550 50	10171	(1300	20 MAR 07)
P	099.75	95.30	029.20	1559.50	101/1	(1300	30 PAR 67)
15	40M AT MOO	RING 8.	1900 30 JA	7N 86 - 3	1300 30	MAR 87.	TAPE 4584/6.
S	14.88	8.03	0.80	42.10	10171	(1300	30 MAR 87)
U	6.56	11.93	-24.20	40.10	10171		30 MAR 87)
V	-1.89	9.84	-35.80	27.60	10171	(1300	30 MAR 87)
Ť	1.68	0.34	-35.80 1.00 1557.50	2.59	10171	(1300	30 MAR 87)
P	1650.90	82.94	1.00 1557.50	2266.60	10171	(1300	30 MAR 87)
•	1030.30	02.54	1557.50	2200.00	10171	(1300	JO MAR 077
23	35M AT MOO	RING 8.	1900 30 JA	7N 86 - 3	1300 30	MAR 87.	TAPE 7163/12.
s	12.14	6.64	0.80	37.40	9809	(1300	30 MAR 87) 30 MAR 87) 30 MAR 87)
U	2.62	10.45	-27.20	36.30	9809	(1300	30 MAR 87)
V	-0.16	8.68	-28.90	35.60	9809	(1300	30 MAR 87)
T	0.92	0.20	0.52	1.73	10171	(1300	30 MAR 87)
P			2367.00				30 MAR 87)
-			200.000		20272	(2000	
33	70M AT MOO	RING 8.	1900 30 JA	7N 86 - 3	2300 21	JUN 86.	TAPE 1964/38.
S	13.88	6.90	0.70	35.00	3413	(2300	21 JUN 86)
	-4.49	11.83	-31.70	27.00	3413	(2300	21 JUN 86)
V	4.64	7.65	-34.30	28.40	3413	(2300	21 JUN 86)
T	0.20	0.05	0.00	0.37	3413	(2300	21 JUN 86) 21 JUN 86) 21 JUN 86)
P	3458.91	30.87	3422 00	3654 00	3413	(2300	21 JUN 86)
•	3430.31	30.07	3422.00	3034.00	3413	(2300	21 001 00,
44	20M AT MOO	RING 8.	1900 30 JA	W 86 - 3	1300 30	MAR 87.	TAPE 6087/13.
s	15.49	9.64	0.80 -32.50	64.60	10171	(1300	30 MAR 87)
U	7.36	13.0	-32.50	61.90	10171	(1300	30 MAR 87)
V	4.66	9.37	-47.30	33.00	10171	(1300	30 MAR 87)
Ť			-0.22				30 MAR 87)
-			7.00	3.10		, 2500	

- (2335 M) SPEED, U, AND V HAVE GAPS IN RECORD LINES: 2036 2397 (1400 25 APR 86 1500 10 MAY 86)
- (3370 M) DEAD BATTERY CAUSED PREMATURE INSTURMENT FAILURE.
- (Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 8. LLP FILTERED 6-HOURLY DATA.

82	OM AT MOOR	ING 8.	0000 1 FEB	86 - 1200	29 MAR	87. TAPE	7210/12.
	MEAN	SD	MIN	MAX I	ENGTH	ENDS A	AT
U	12.75	15.92			1687	(1200 29	
V	-3.53	12.97		31.48	1687	(1200 29	
${f T}$	2.11	0.20			1687	(1200 29	
P	899.92				1687		
S	34.74	2.61	34.66	34.84	1655	(1200 29	MAR 87)
15	40m at moo	RING 8.	0000 1 FEB	86 - 1200	29 MAR	87. TAPE	4584/6.
U	6.61	11.75	-20.58	38.75	1687	(1200 29	MAR 87)
_	-1.84				1687	(1200 29	
Ť	1.68	0.34	1.09		1687	(1200 29	
P	1651.04	82.46	1580.03		1687	(1200 29	
s		2.58	34.68		1674	(1200 29	
-	340,0	2.30	34.00	34.07	2074	(1200 23	THE OTT
2335M AT MOORING 8. 0000 1 FEB 86 - 1200 29 MAR 87. TAPE 7163/12					E 7163/12.		
U	2.73	10.21	-23.59	34.30	1619	(1200 29	MAR 87)
V	-0.07	8.39	-25.06	28.33	1619	(1200 29	MAR 87)
${f T}$	0.92	0.20		1.54	1687	(1200 29	MAR 87)
P	2416.92	70.13	2367.21	2936.67	1687	(1200 29	MAR 87)
S	34.72	2.81	34.68	34.76	1673	(1200 29	MAR 87)
33	70M AT MOC	RING 8.	0000 1 FE	B 86 - 1800	20 JUN	86. TAPI	E 1964/38.
U	-4.47	11.75	-28.20	22.30	560	(1800 20	JUN 86)
		7.43	-24.56			(1800 20	
Т	4.71 0.20	0.05	0.02		560	(1800 20	
P	3459.14	30.85	3434.02	3640.44	560	(1800 20	
4420M AT MOORING 8. 0000 1 FEB 86 - 1200 29 MAR 87. TAPE 6087/13.							
44	ZUM AT MOC	KING 8.	OUOU I FE.	B 86 - 1200	29 MAR	8/. TAPI	5 608//13.
U	7.41	12.66	-26.86	57.47	1687	(1200 29	MAR 87)
v	4.72	8.88	-44.01	27.75	1687	(1200 29	
Ť		0.07	-0.22	0.17	1687	(1200 29	
_	= - 	- · ·		·	••	,	

(820 M) GAPS IN SALINITY RECORD, BAD VALUES REMOVED

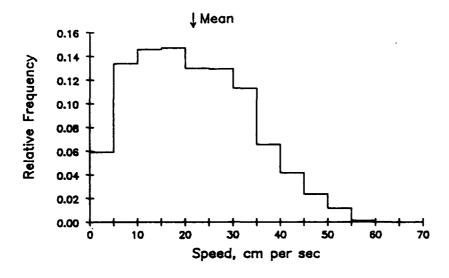
(1540 M) GAPS IN SALINITY RECORD, BAD VALUES REMOVED

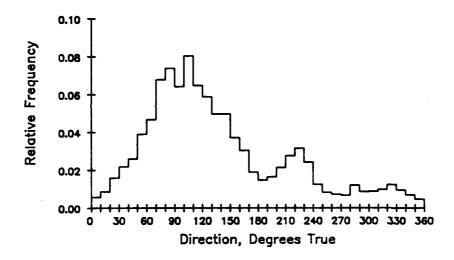
(2335 M) GAPS IN U & V IN UNFILTERED RECORD, LLP GAPS LINES: 332 - 399 (1800 24 APR 86 - 1200 11 MAY 86) GAPS IN SALINITY RECORD, BAD VALUES REMOVED

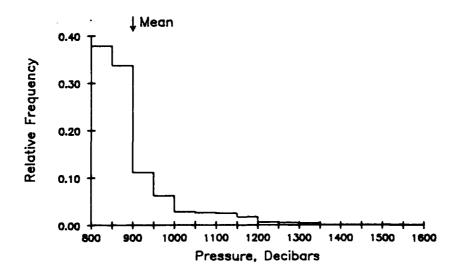
(3370 M) DEAD BATTERY CAUSED PREMATURE INSTRUMENT FAILURE

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

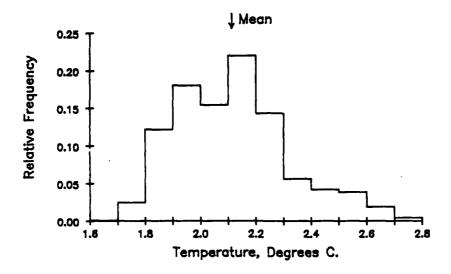
820 METERS AT MOORING 8. TAPE 7210/12.

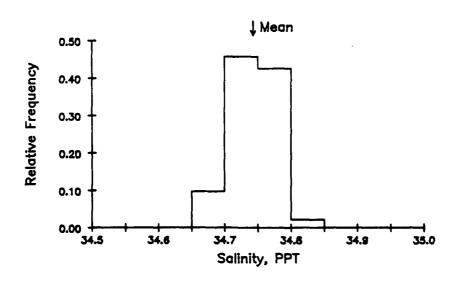




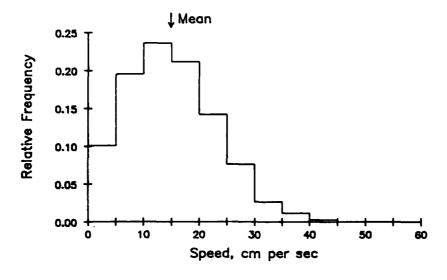


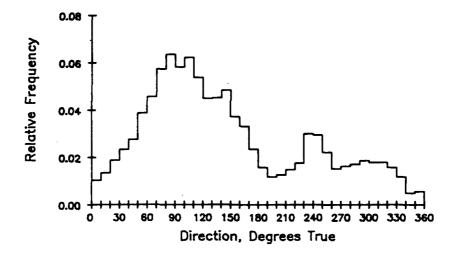
820 METERS AT MOORING 8. TAPE 7210/12.

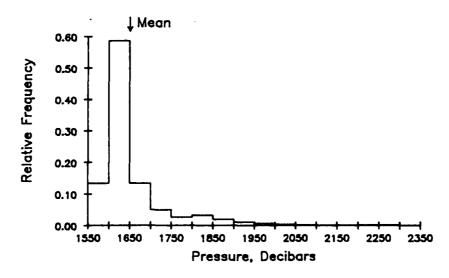




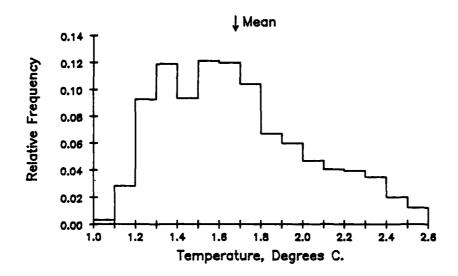
1540 METERS AT MOORING 8. TAPE 4584/6.

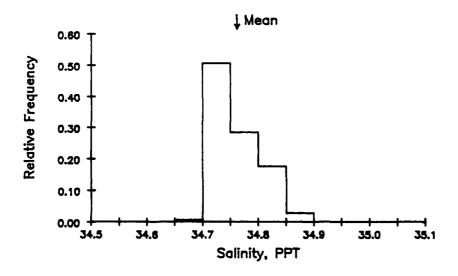




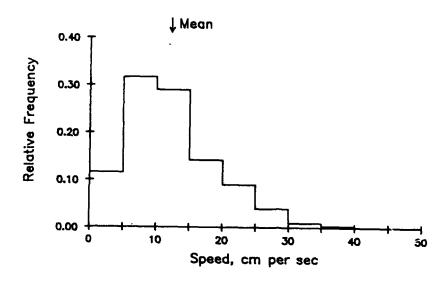


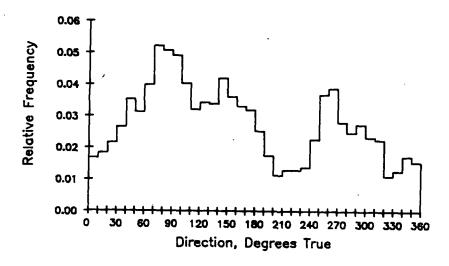
1540 METERS AT MOORING 8. TAPE 4584/6.

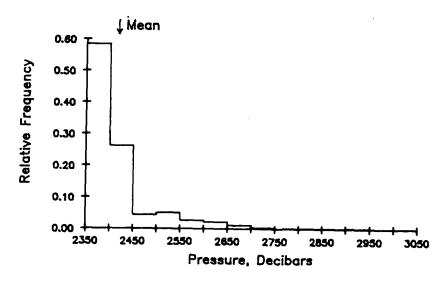




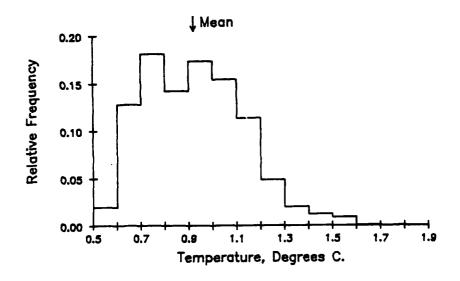
2335 METERS AT MOORING 8. TAPE 7163/12.

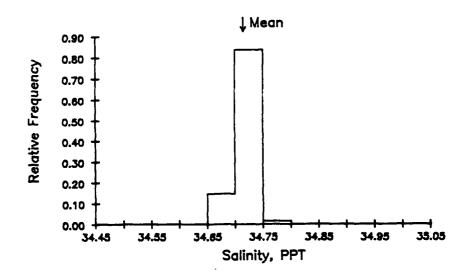




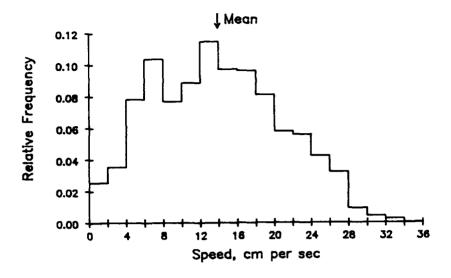


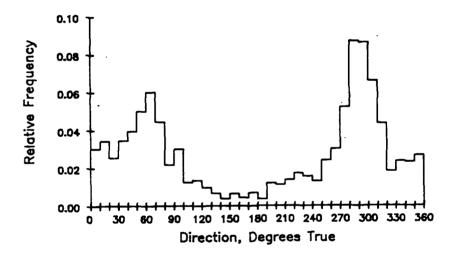
2355 METERS AT MOORING 8. TAPE 7163/12.

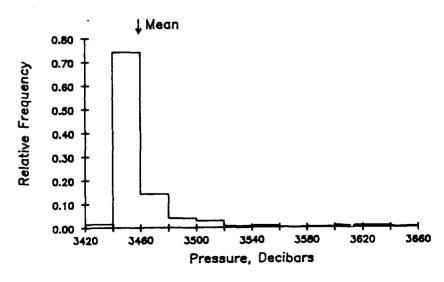




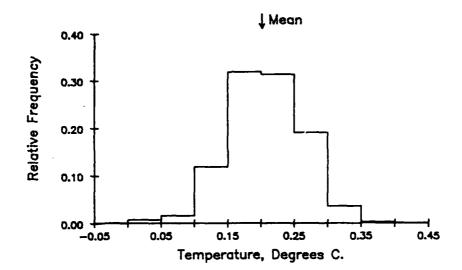
3370 METERS AT MOORING 8. TAPE 1964/38.



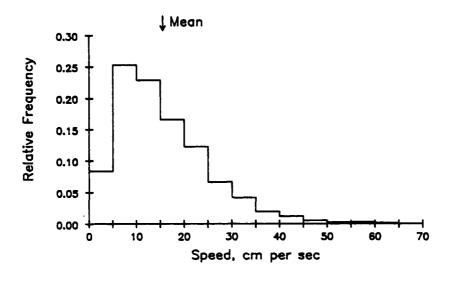


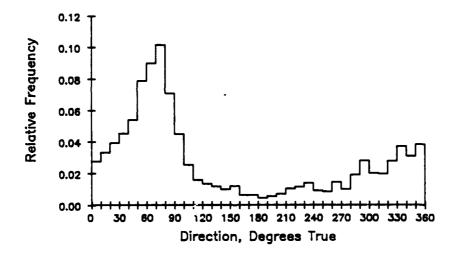


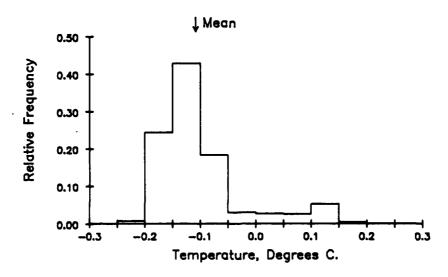
3370 METERS AT MOORING 8. TAPE 1964/38.

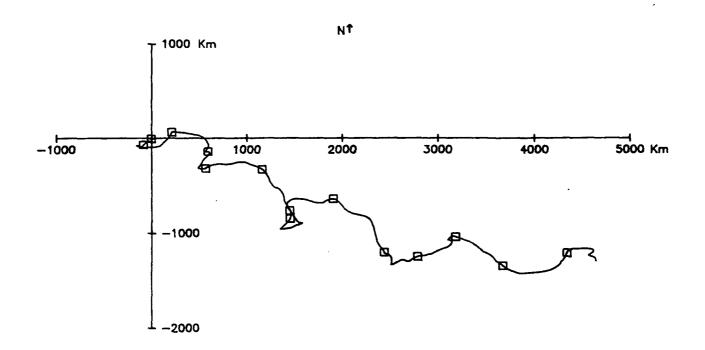


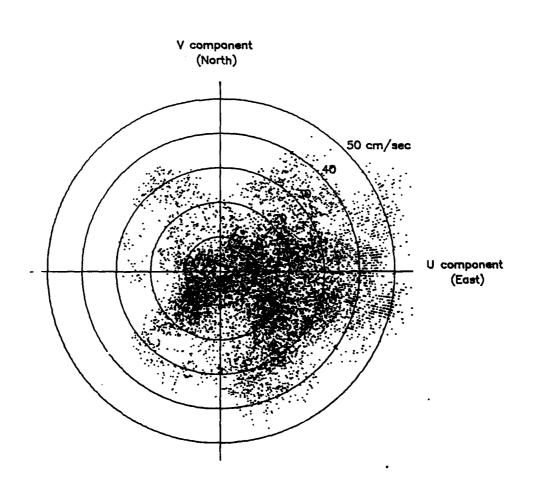
4420 METERS AT MOORING 8. TAPE 6087/13.



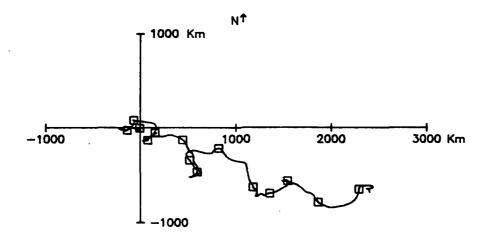


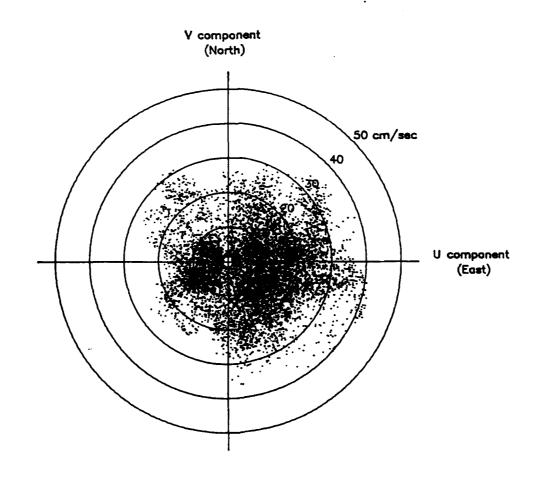




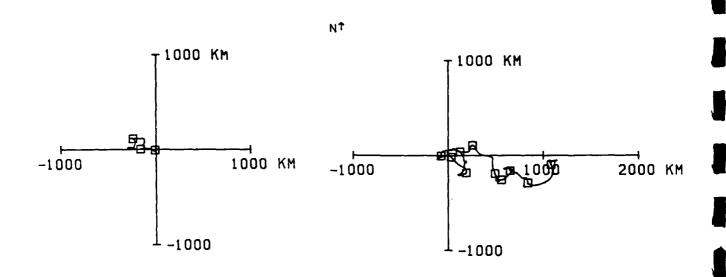


1540M AT MOORING 8. 30 JAN 86 - 30 MAR 87. TAPE 4584/6.



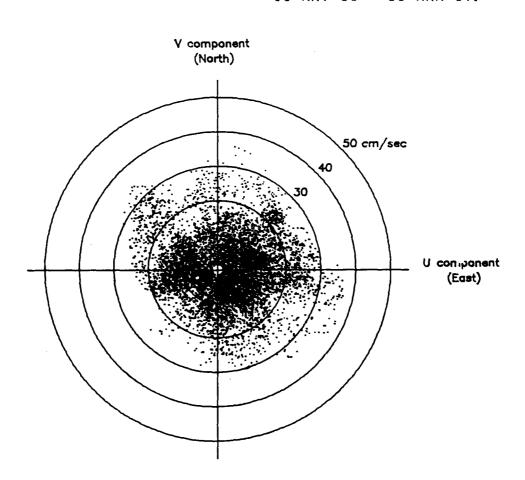


2355M AT MOORING 8. 30 JAN 86 - 30 MAR 87. TAPE 7163/12.

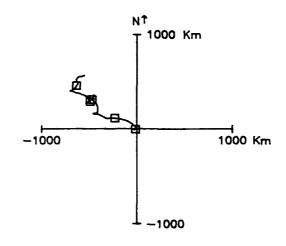


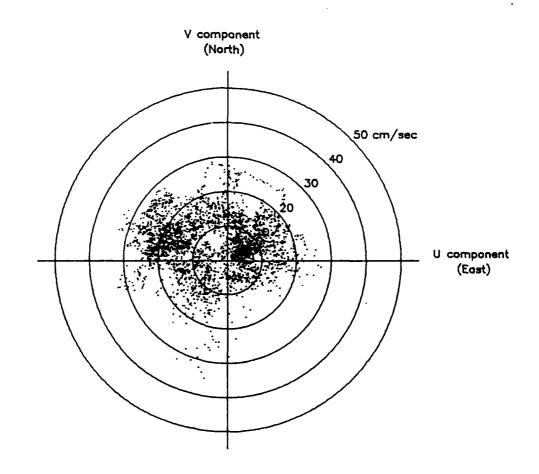
30 JAN 86 - 25 APR 86.

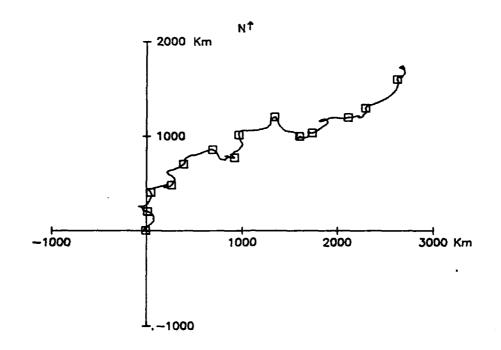
10 MAY 86 - 30 MAR 87.

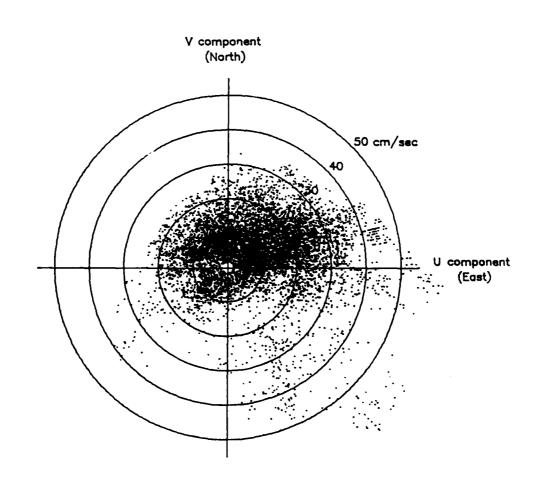


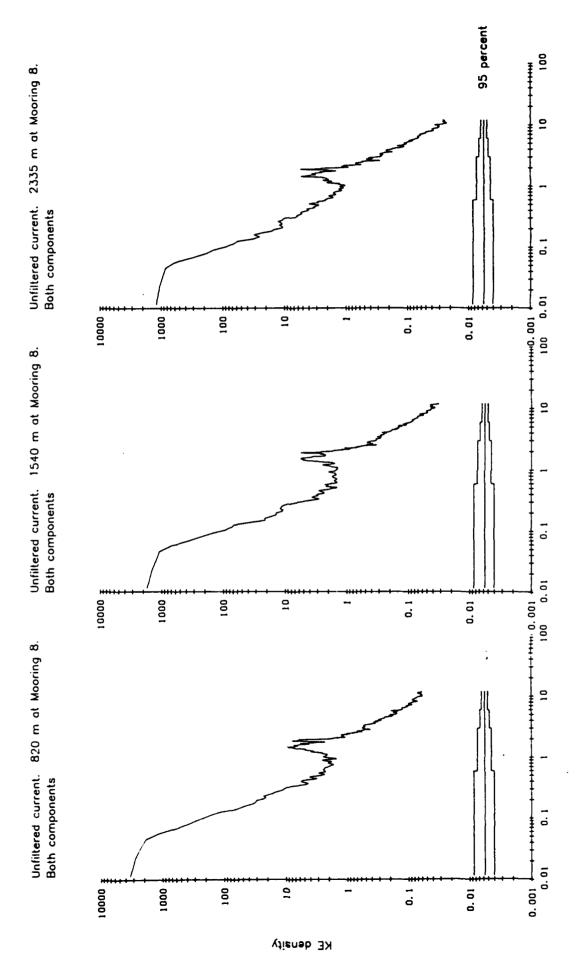
3370M AT MOORING 8. 30 JAN 86 - 21 JUN 86. TAPE 1964/38.





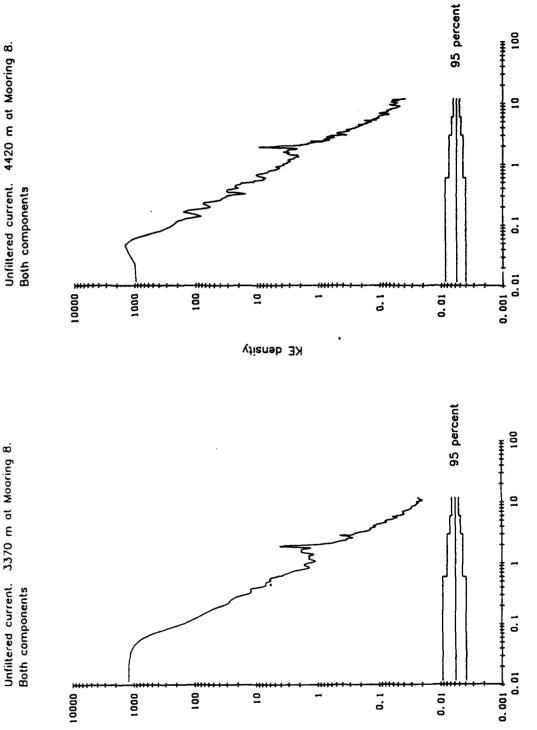






frequency, cycles per day



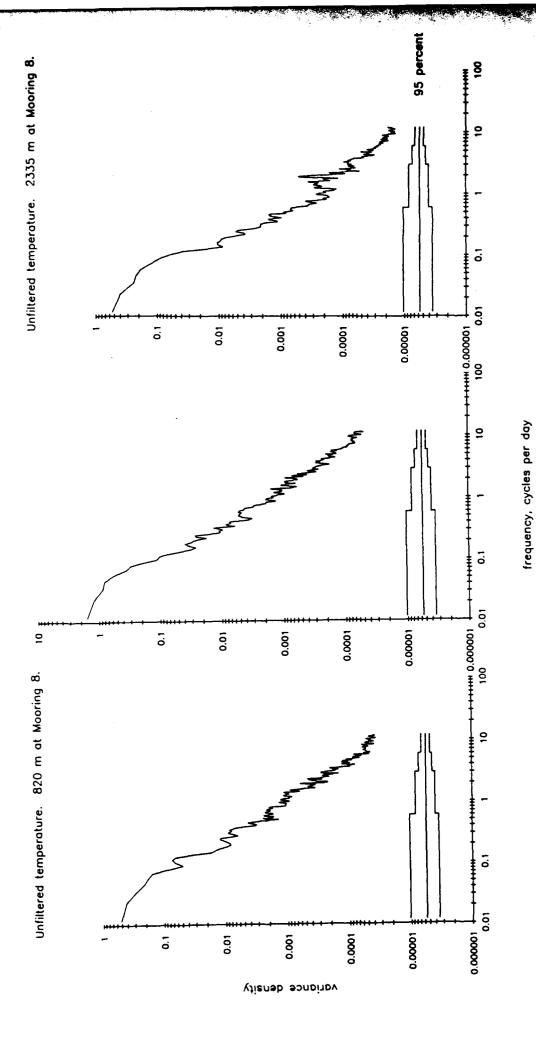


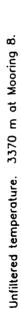
KE density

frequency, cycles per day

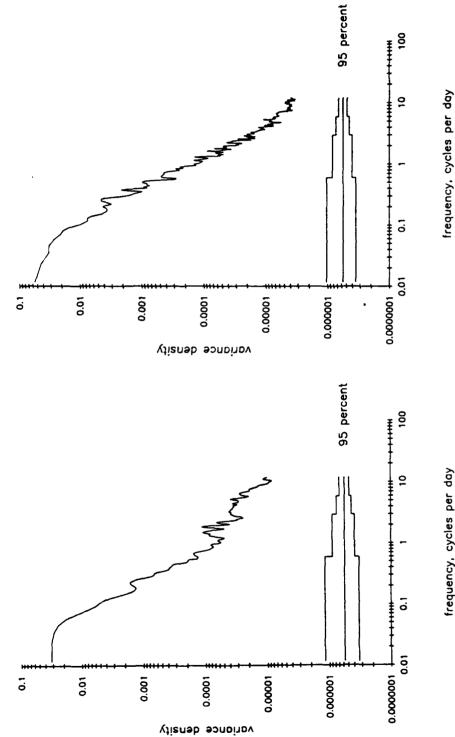
frequency, cycles per day

Unfiltered temperature. 1540 m at Mooring 8.

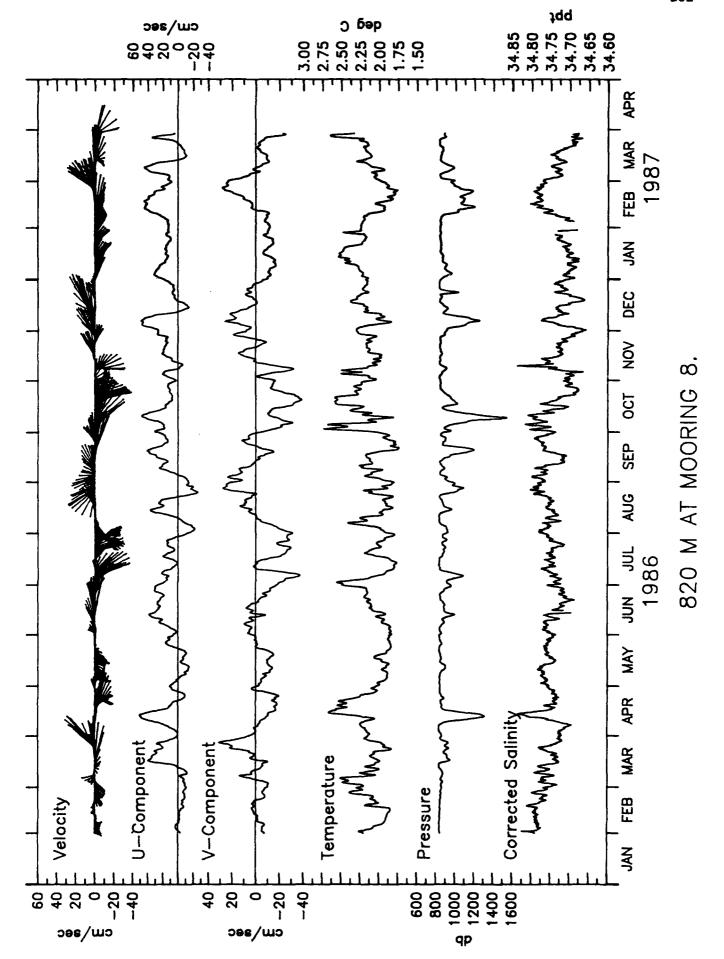


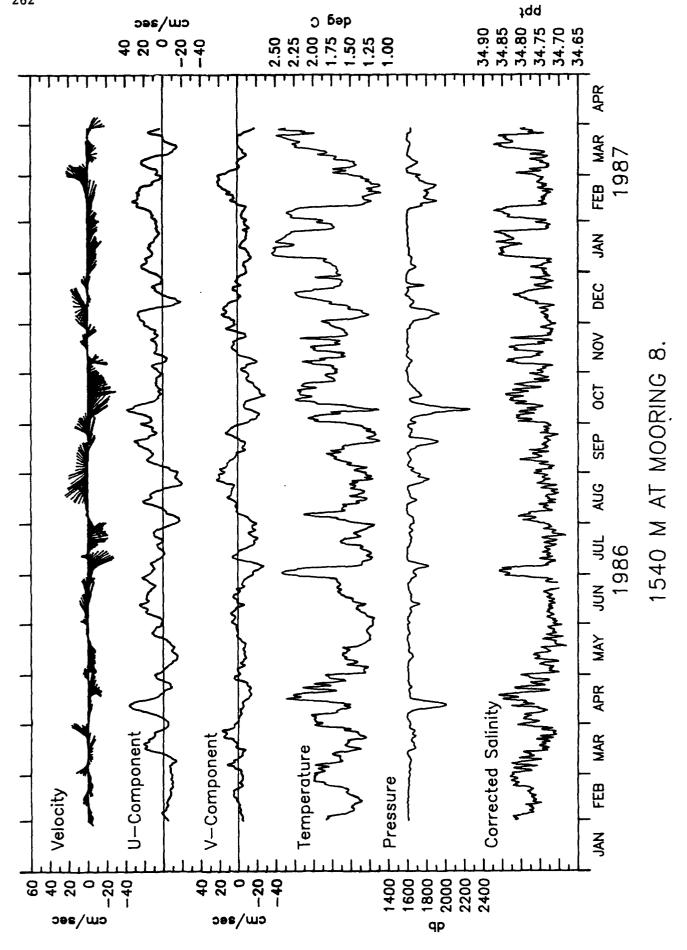


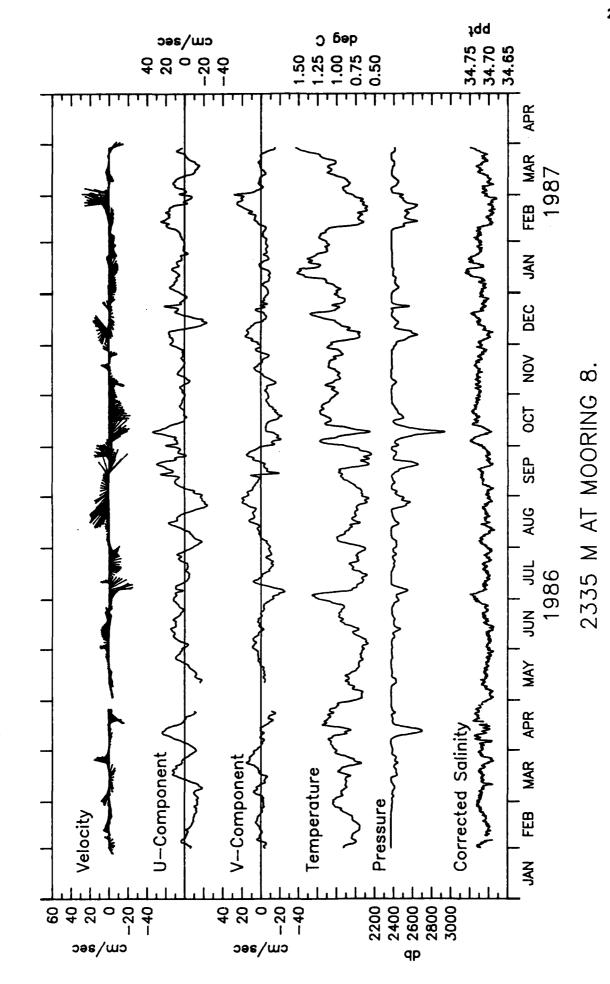
Unfiltered temperature. 4420 m at Mooring 8.

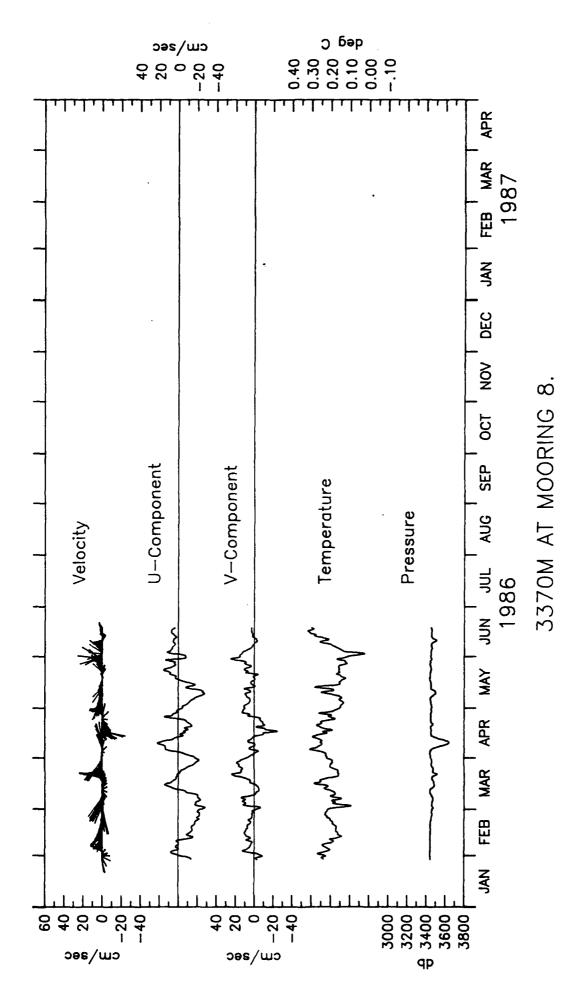


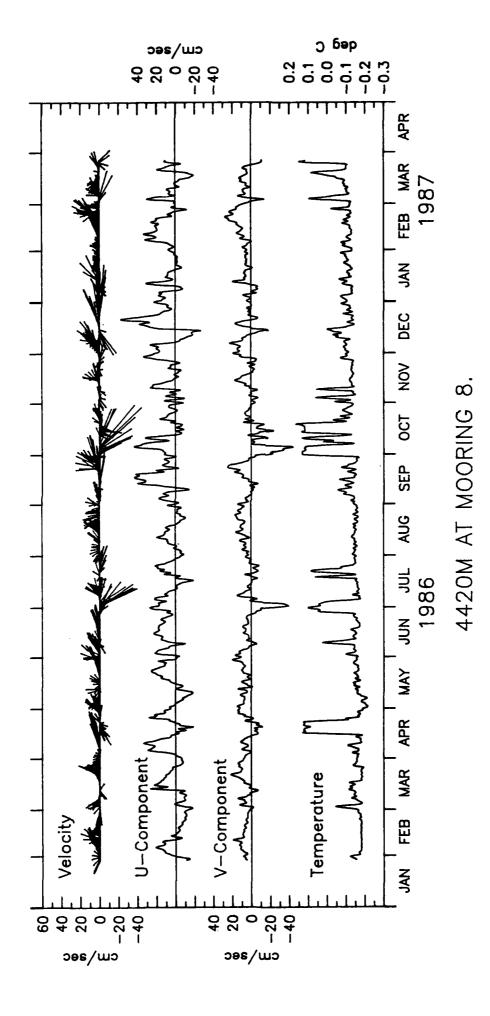
frequency, cycles per day

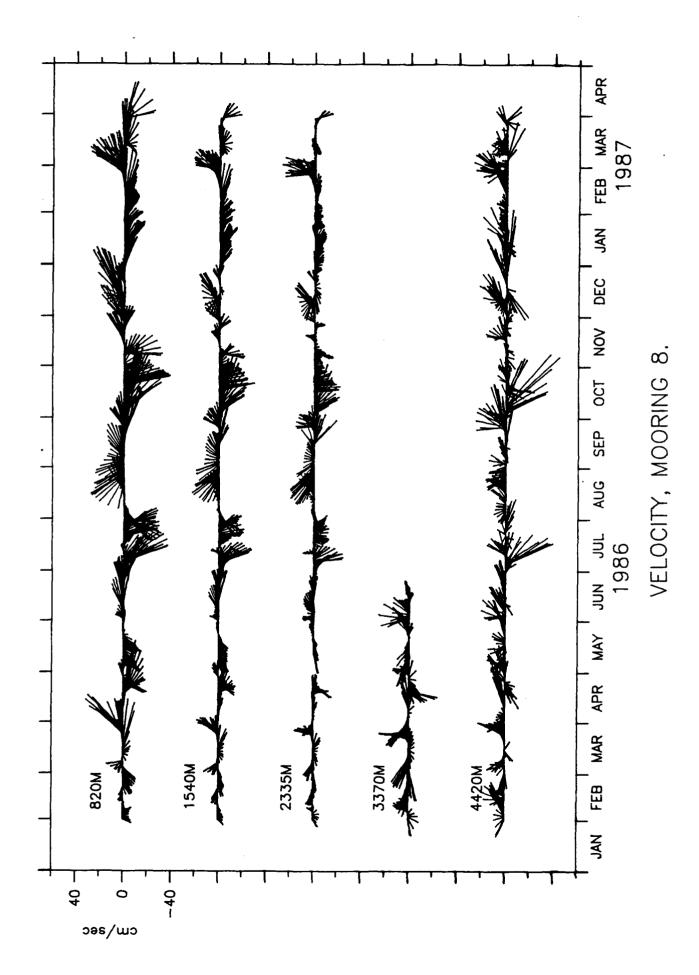


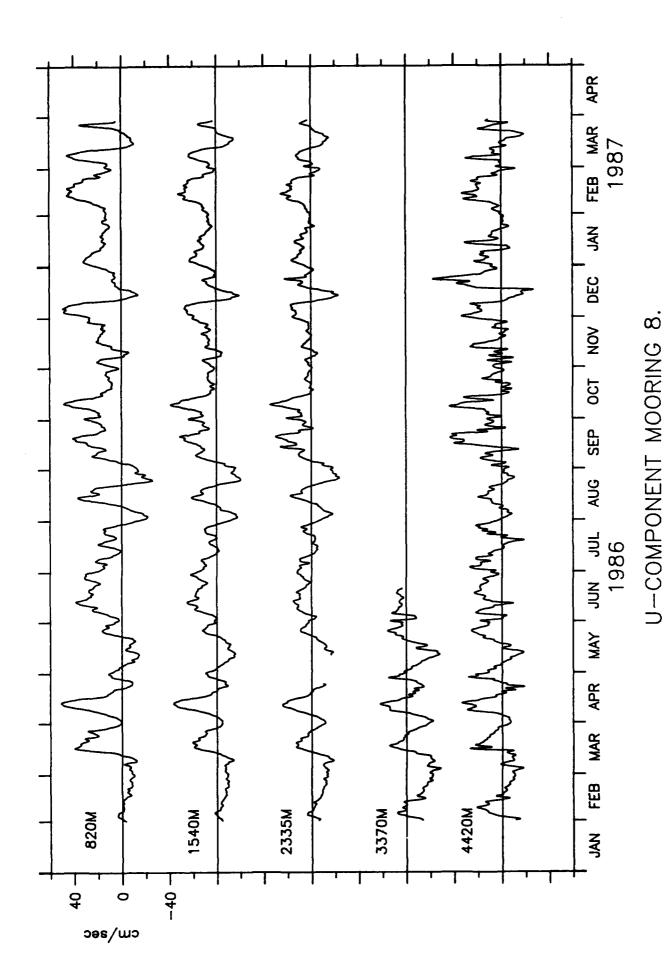


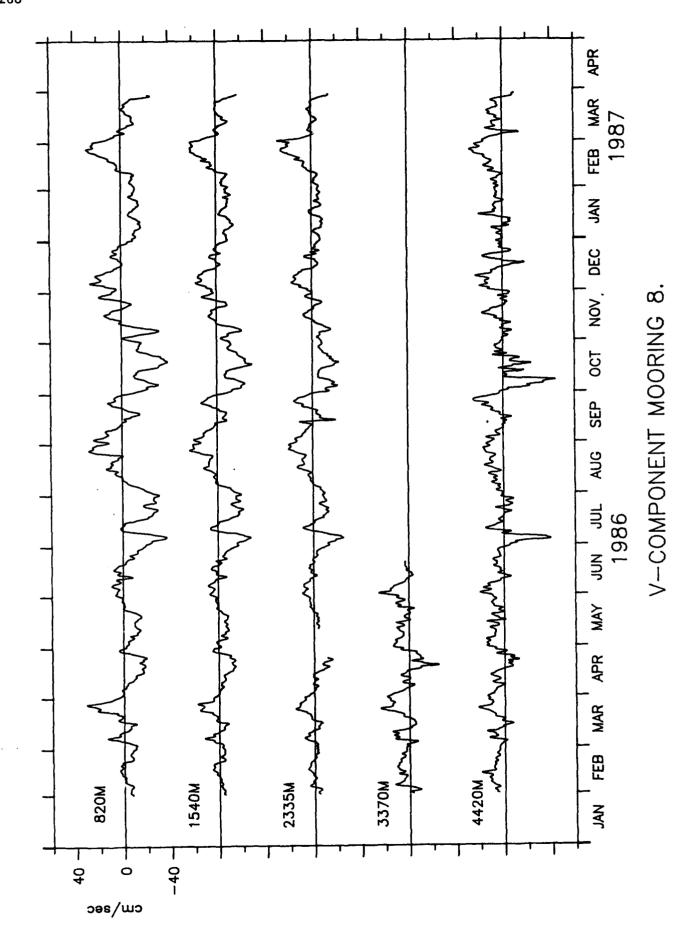


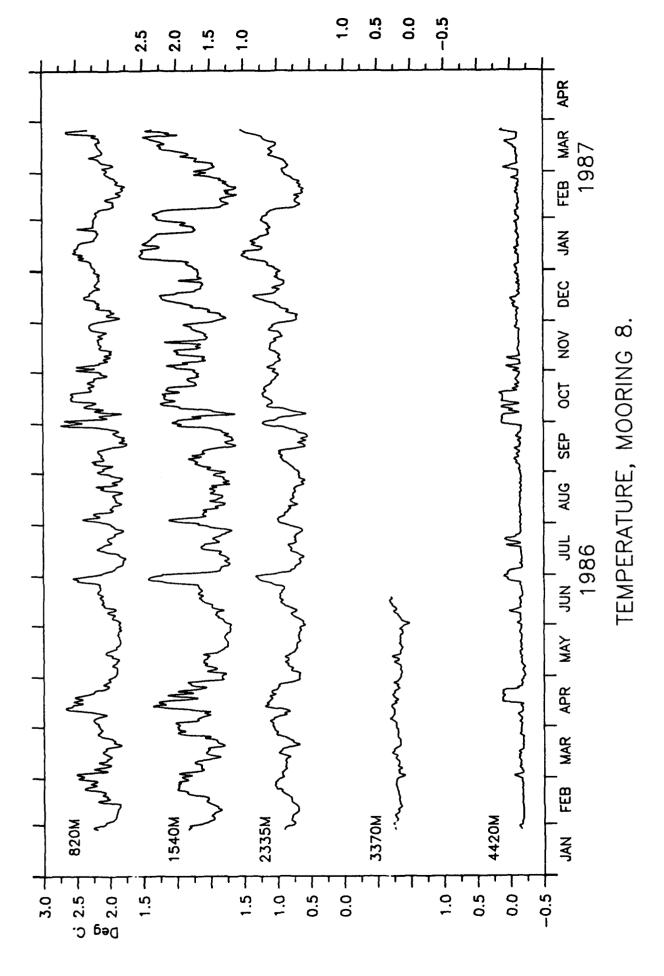


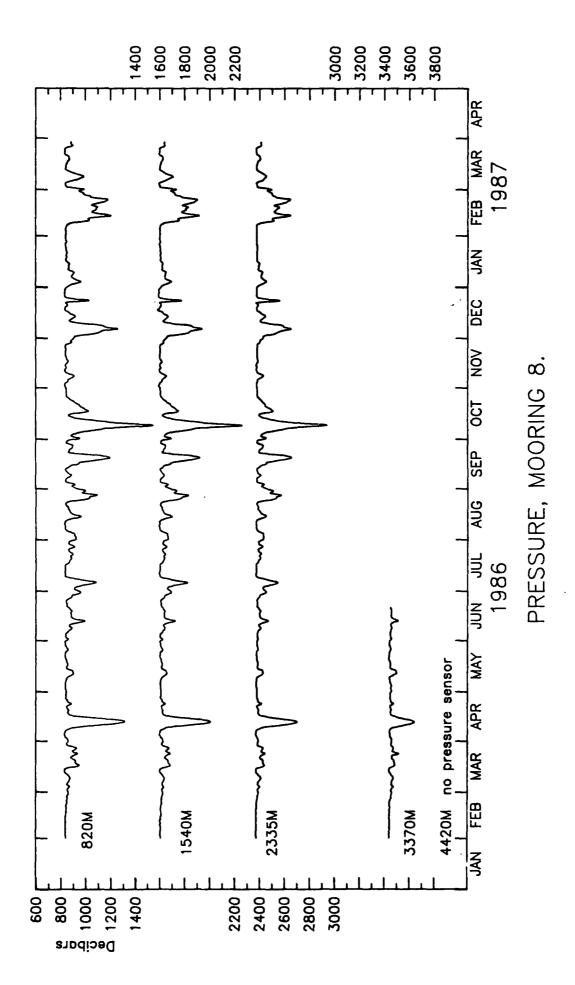


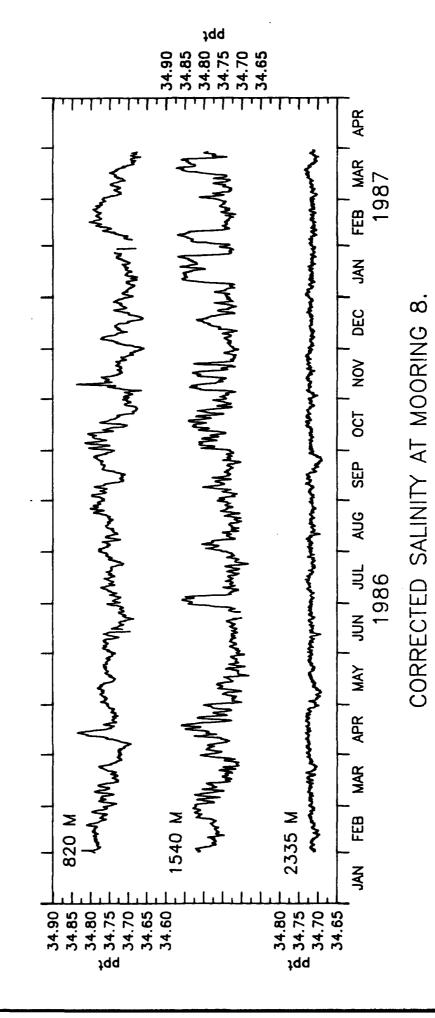












MOORING 9

49°18.63'S, 38°00.57'W

1987 FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR	1600 M	2355 M	3375 M	N 0287		DATA RETURN FROM MOORING 9.
JAN F	W	33 00	3	n=-a	111	- - - - -

MOORING 9. UNFILTERED HOURLY DATA

1600M 15 MOORING 9. 0600 31 JAN 86 - 1100 31 MAR 87. TAPE 7211/13.

	MEAN	SD	MIN	MAX	LENGTH	ENDS AT
s	14.81	9.92	0.80	51.40	10182	(1100 31 MAR 87)
U	6.23	13.54	-31.70	45.50	10182	
V	-3.37	9.18	-37.00	21.70	10182	(1100 31 MAR 87)
T	1.85		0.97	2.79	10182	
P		73.35	1615.90	2099.20	10141	(1100 31 MAR 87)
23	55M AT MOO	RING 9.	0600 31 J	AN 86 - 1	1100 31	MAR 87. TAPE 4583/5.
s	11.02	7.08	0.80	41.90	10182	(1100 31 MAR 87)
Ū			-26.50			
v	-2.06	6.54	-26.00	34.30	10182	
T	1.08	0.29	0.35	2.02	10182	
P	2431.76	71.04	2387.10	2894.40	10182	
33	75M AT MOO	RING 9.	0600 31 J	AN 86 - (700 24	MAR 87. TAPE 2268/36.
s	9.63	7.08	0.80	40.10	10010	(0700 24 MAR 87)
U	3.44	9.72	-31.30			
V			-25.70			(0700 24 MAR 87)
T	0.32	0.14	0.02	0.74	10010	(0700 24 MAR 87)
P	3459.13	40.97	3417.00	3742.00	10010	(0700 24 MAR 87)
43	70M AT MOO	RING 9.	0600 31 J	AN 86 - 3	1100 31	MAR 87. TAPE 6088/13.
S	19.17	16.67	0.80	73.00	10182	(1100 31 MAR 87)
U	14.18		-27.40	63.00	10182	
٧	-2.71	14.11	-71.20	24.40	10182	(1100 31 MAR 87)
T	0.01	0.12	-0.20	0.26	10182	(1100 31 MAR 87)

```
(1600 M) PRESSURE OFFSCALE, GAPS IN RECORD, LINES:
9244-9253 (0900 20 FEB 87 - 1800 20 FEB 87)
9260-9269 (0100 21 FEB 87 - 1000 21 FEB 87)
9273-9283 (1400 21 FEB 87 - 0000 22 FEB 87)
9290-9299 (0700 22 FEB 87 - 1600 22 FEB 87)
```

(3375 M) DATA A FEW LINES SHORT DUE TO CLOCK MALFUNCTION.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 9. LLP FILTERED 6-HOURLY DATA

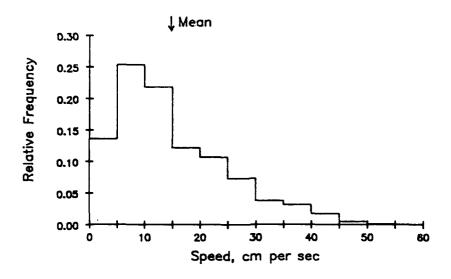
1600M AT MOORING 9. 0600 1 FEB 86 - 0600 30 MAR 87. TAPE 7211/13.

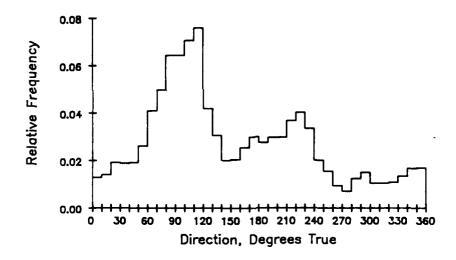
						-		•
	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT	
U	6.23	13.37	-27.88	38.98	1689	(0600 3	O MAR	87)
V		8.89	-33.49	17.09	1689	(0600 3		
Ť	1.85					(0600 3		
P			1618.06	1995.39	1672	(0600 3		
s	34.75		34.67			(0600 3		
3	34.73	2.24	34.07	34.03	1233	(0000 5	O PAR	0,,
23	55M AT MOO	RING 9.	0600 1 FE	B 86 - 06	00 30 MAR	87. TA	APE 458	33/5.
U	4.08	10.20	-23.26	33.59	1689	(0600 3	O MAR	87)
V	-2.06							
T	1.07							
P	2431.85	70.70	2389.78	2863.33	1689	(0600 3		
s	2431.85 34.72	2.42	34.67	34.78	1651	(0600 3		
	75M AT MOO					•		·
U	3.49	9.49	-29.88	35.56	1661	(0600 2	3 MAR	87)
	-1.31							
Ť	0.32		0.03	0.70	1661	(0600 2		
P	3459.24			3725.24	1661	(0600 2		
_						•		ŕ
43	70M AT MOO	RING 9.	0600 1 FE	B 86 - 06	00 30 MAR	87. TA	PE 608	38/13.
U			-15.84			(0600 3	0 MAR	87)
V	-2.73	13.57	-67.63	20.97	1689	(0600 3	0 MAR	87)
T	0.01	0.12	-0.21	0.25	1689	(0600 3		
						•		•

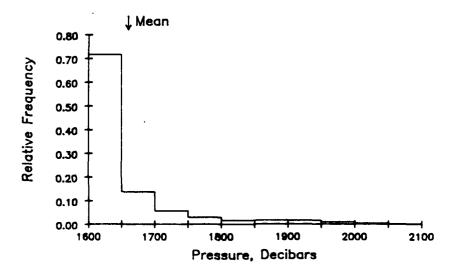
- (1600 M) PRESSURE OFFSCALE, GAPS IN UNFILTERED FILE, LLP
 GAPS LINES:
 1534 1550 (1200 19 FEB 87 1200 23 FEB 87)
 GAPS IN SALINITY RECORD, OFFSCALE DATA POINTS REMOVED
- (2355 M) GAPS IN SALINITY RECORD, OFFSCALE DATA POINTS REMOVED
- (3375 M) DATA A FEW LINES SHORT DUE TO CLOCK MALFUNCTION.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

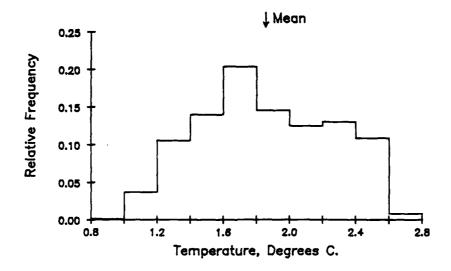
1600 METERS AT MOORING 9. TAPE 7211/13.

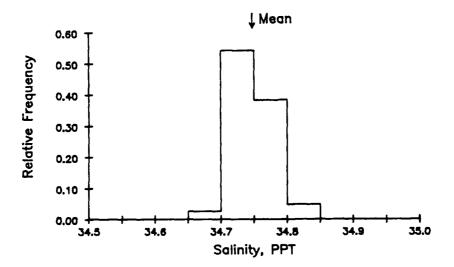




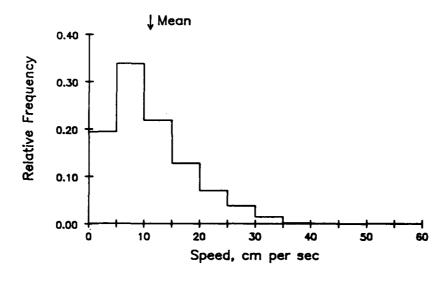


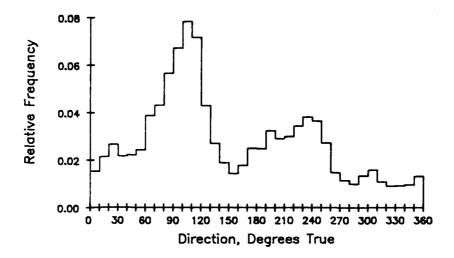
1600 METERS AT MOORING 9. TAPE 7211/13.

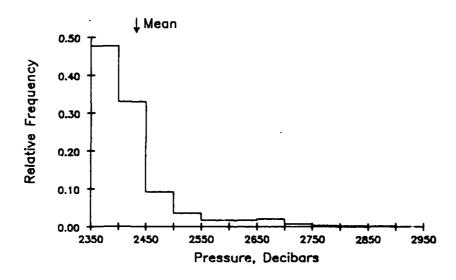




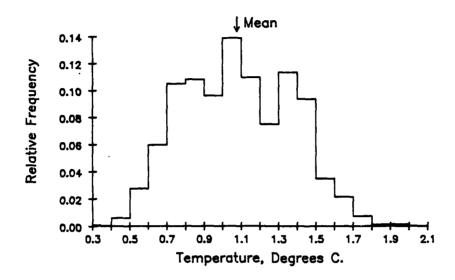
2355 METERS AT MOORING 9. TAPE 4583/5.

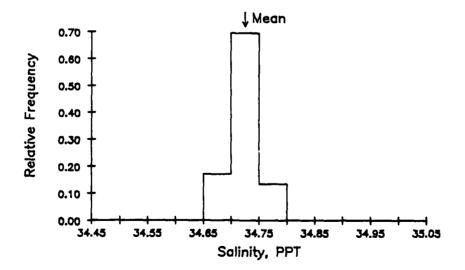




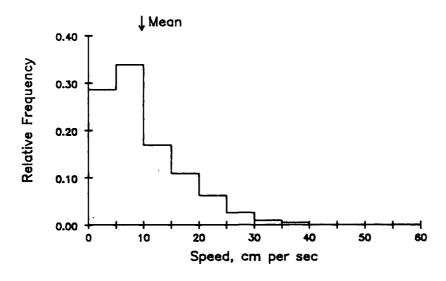


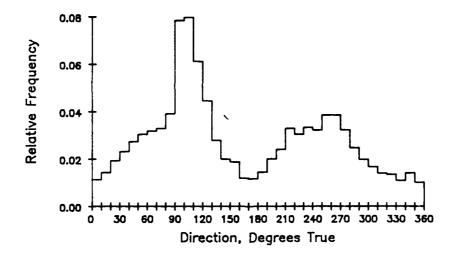
2355 METERS AT MOORING 9. TAPE 4583/5.

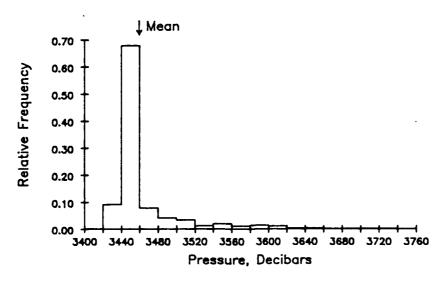




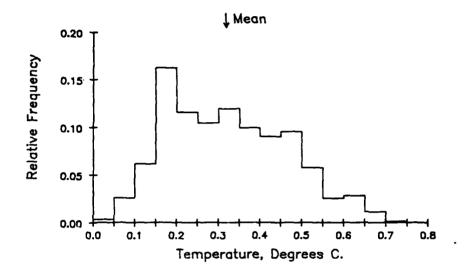
3375 METERS AT MOORING 9. TAPE 2268/36.



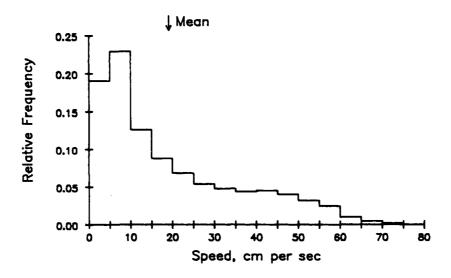


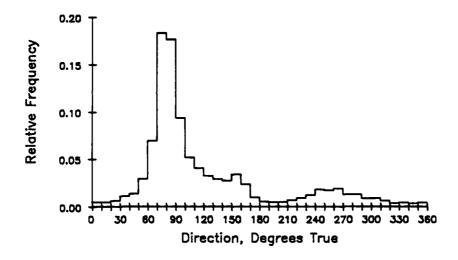


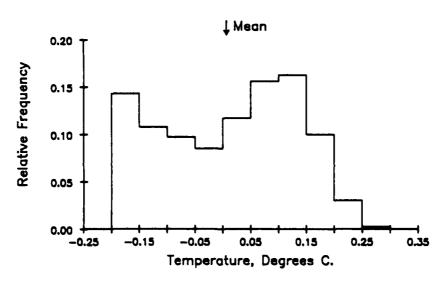
3375 METERS AT MOORING 9. TAPE 2268/36.

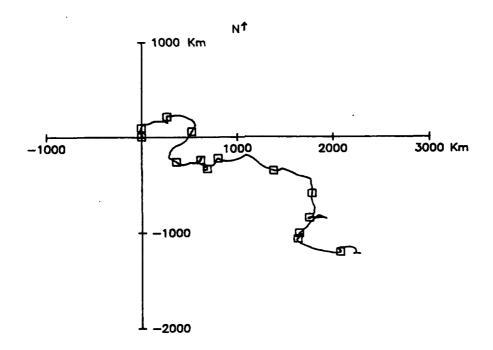


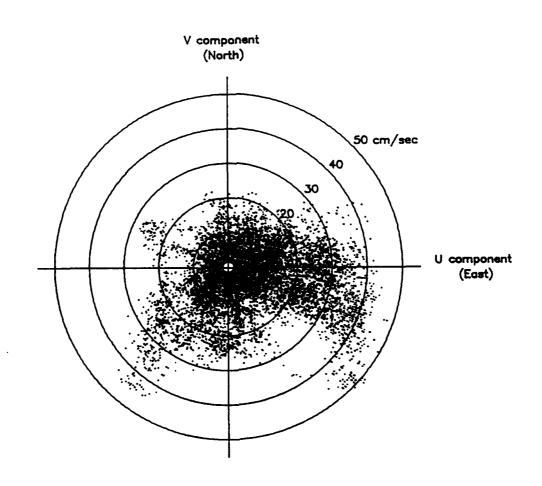
4370 METERS AT MOORING 9. TAPE 6088/13.



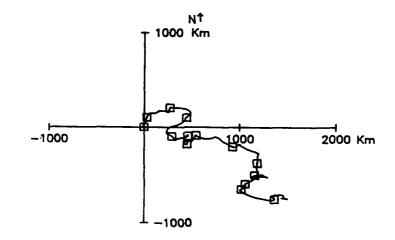


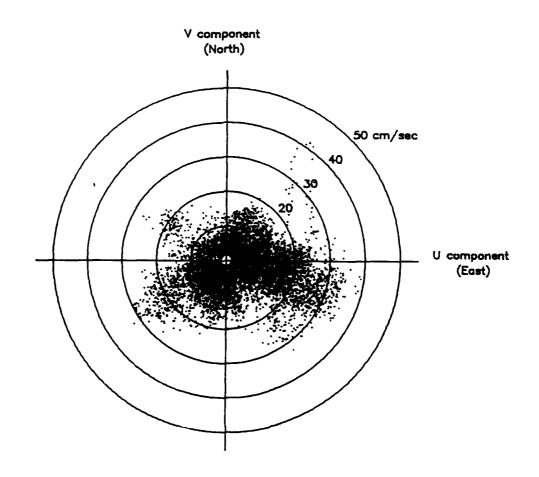




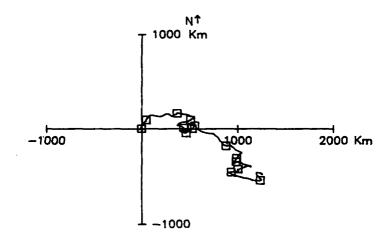


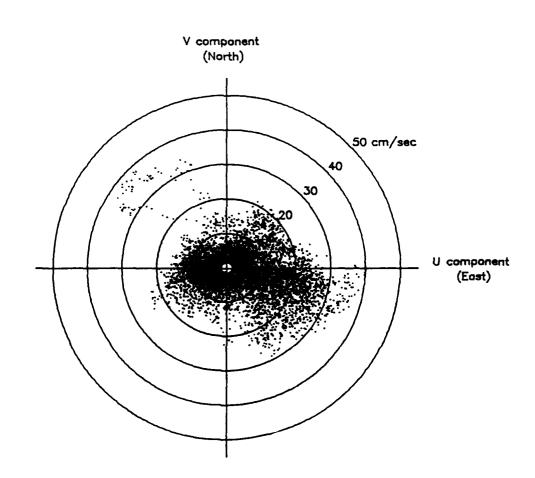
2355M AT MOORING 9. 31 JAN 86 - 31 MAR 87. TAPE 4583/5.



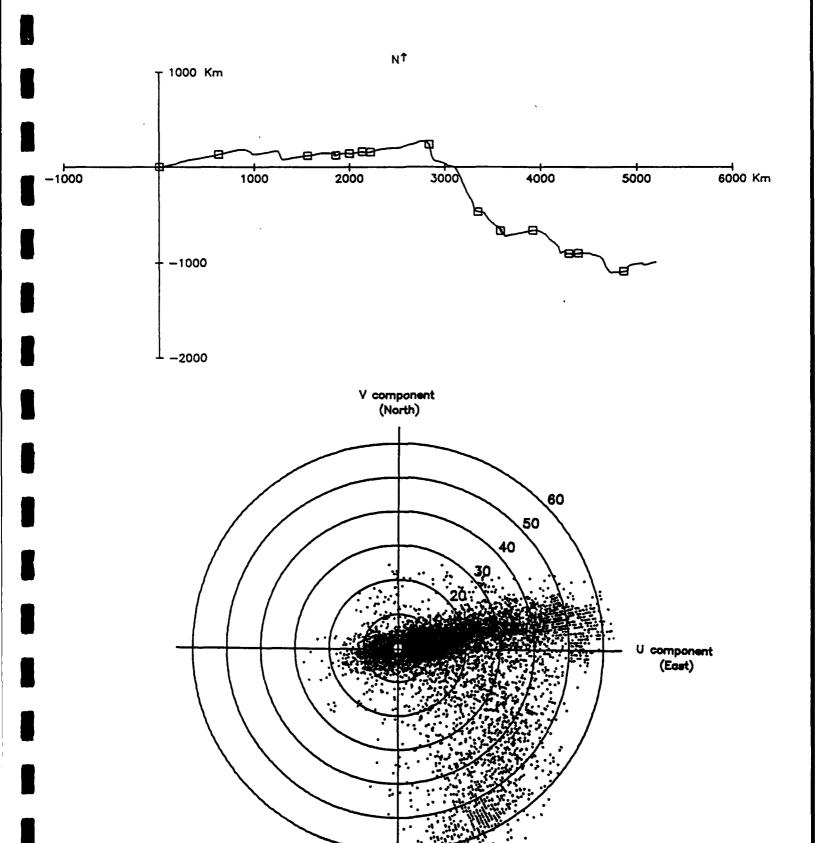


3375M AT MOORING 9. 31 JAN 86 - 24 MAR 87. TAPE 2268/36.

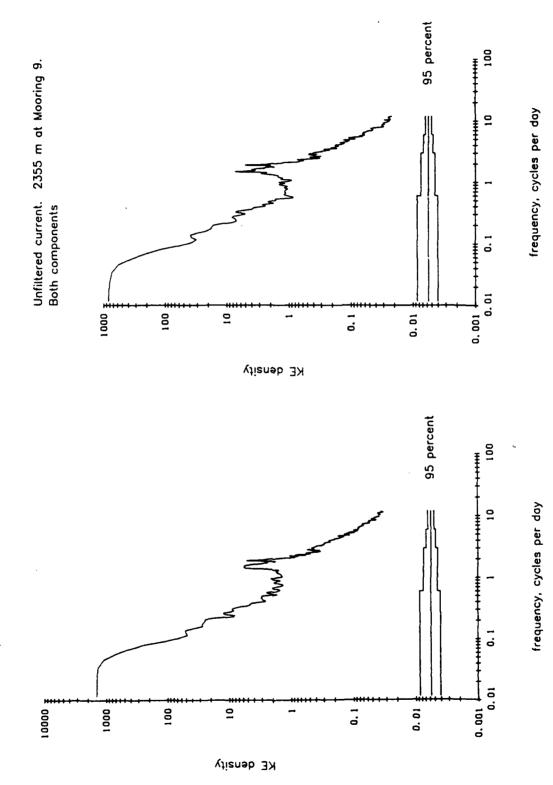




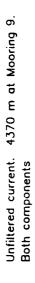
4370M AT MOORING 9. 31 JAN 86 - 31 MAR 87. TAPE 6088/13.

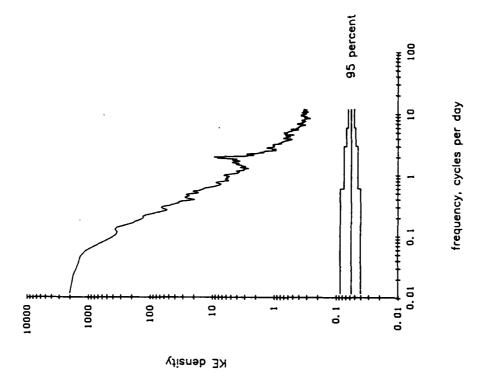


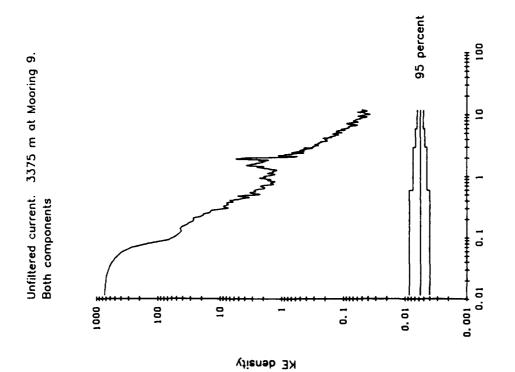




frequency, cycles per day









5 #

0.

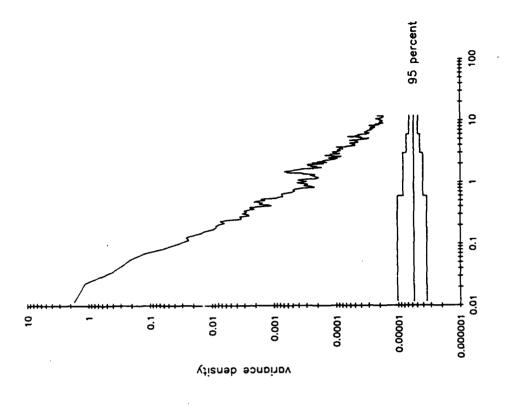
0.0

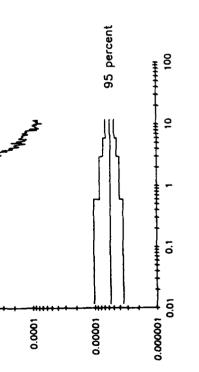
variance density

0.001



Unfiltered temperature. 2355 m at Mooring 9.

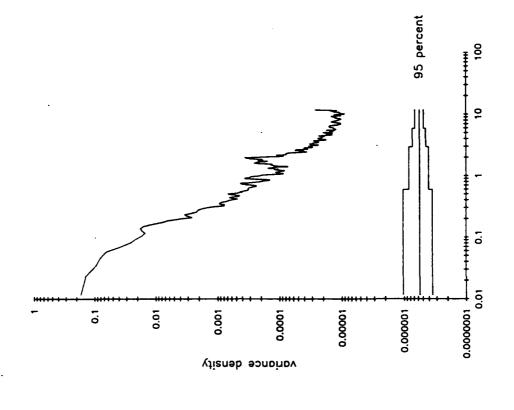


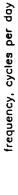


frequency, cycles per day

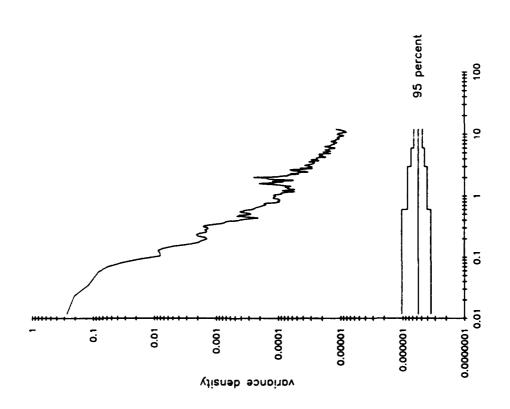
frequency, cycles per day

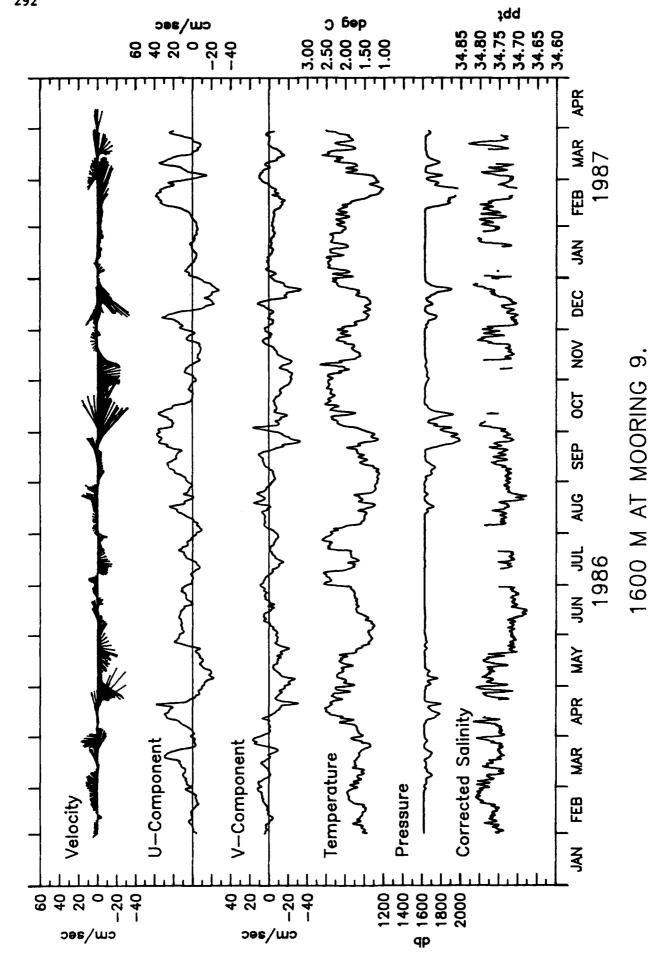


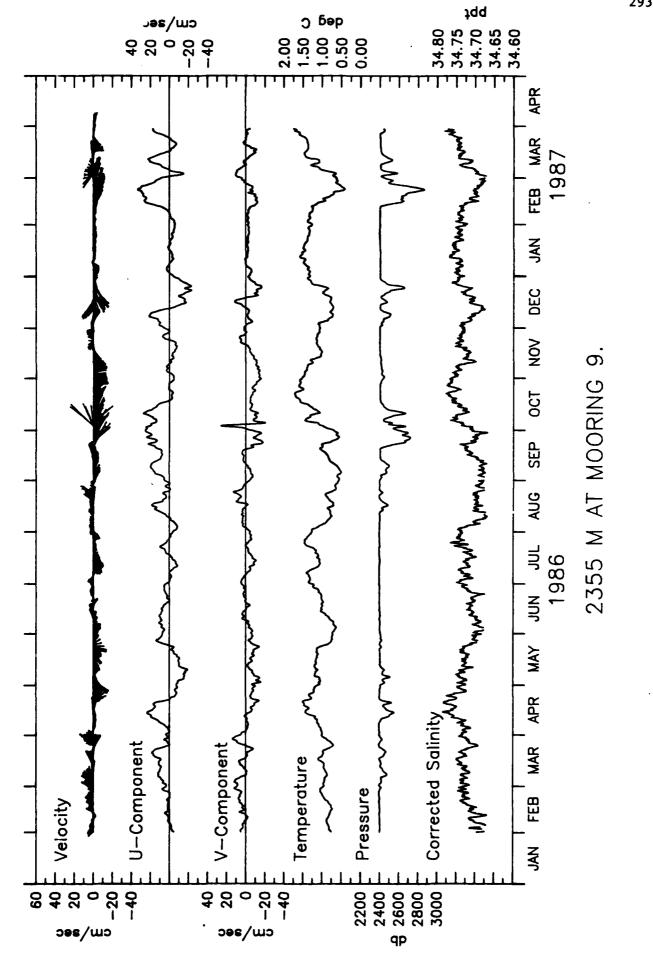


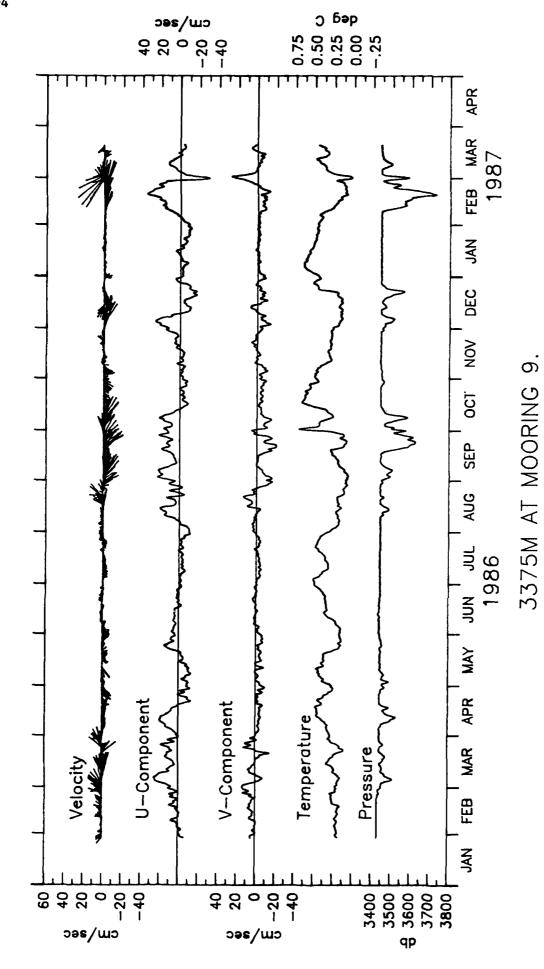


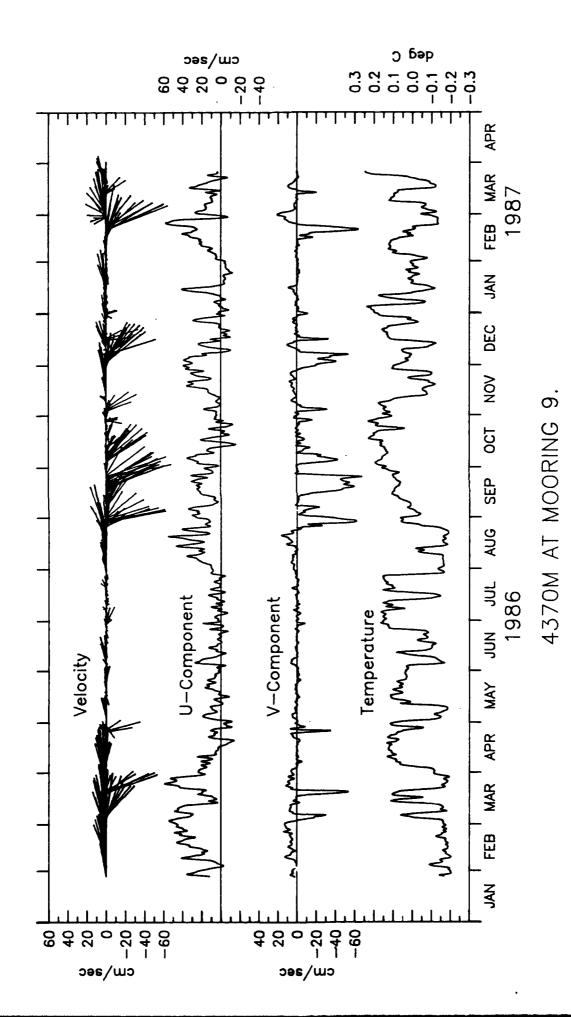
frequency, cycles per day

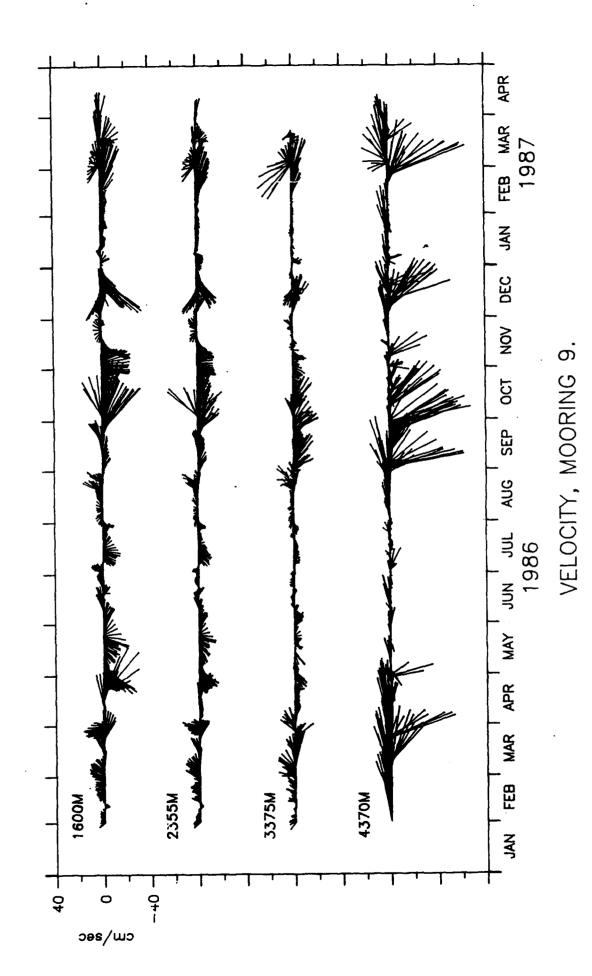


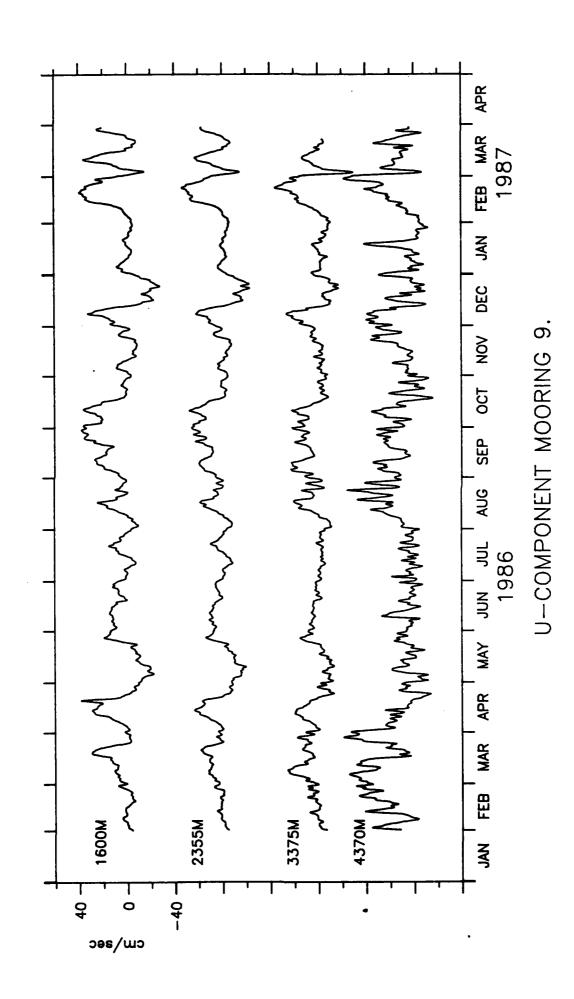


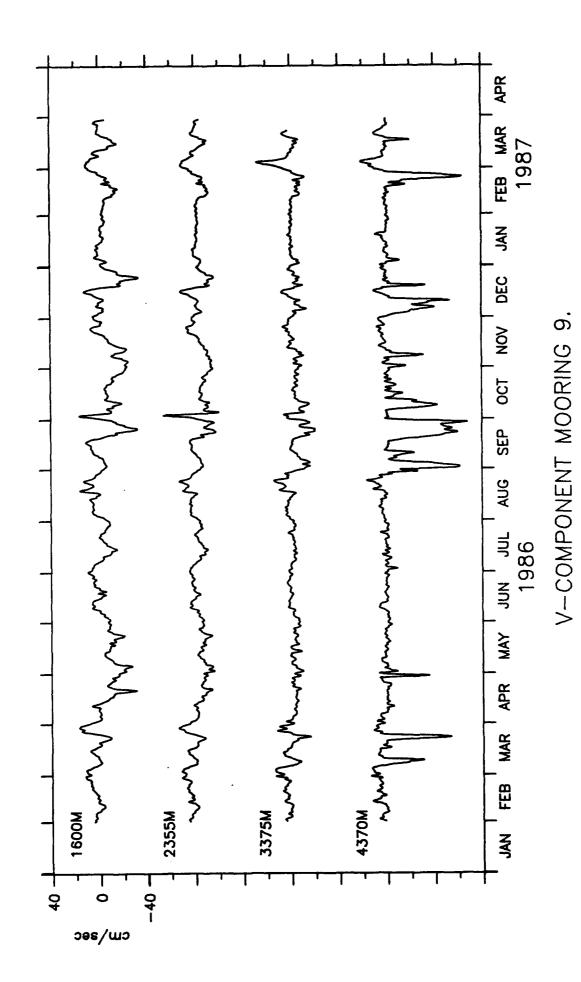


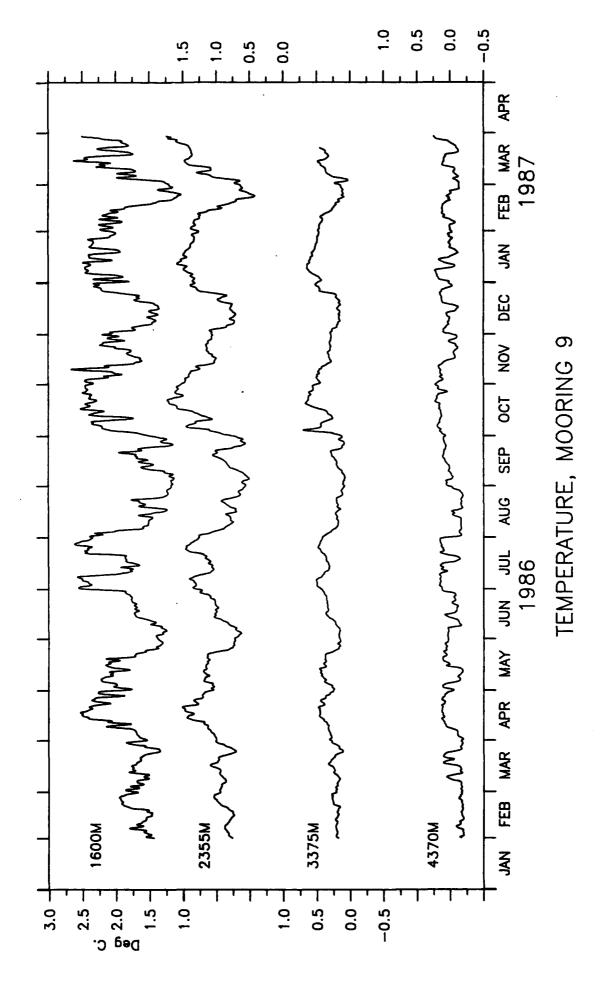


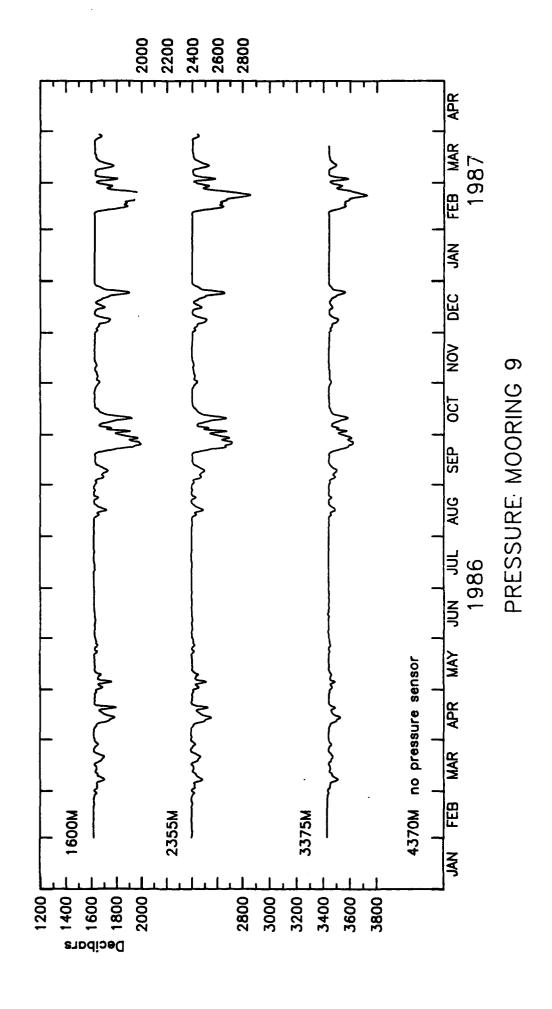


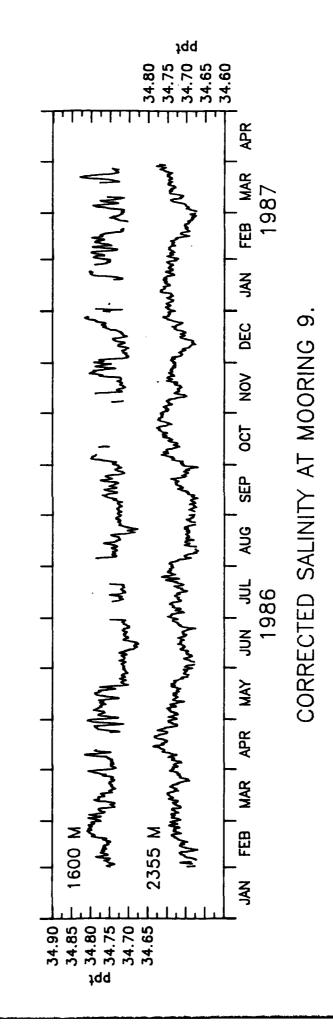












MOORING 10

49°09.81'S, 36°06.73'W

	_	_
	APR	4
37	MAR	
198	FEB .	#
	JAN J	
	DEC .	
	NON	1
	OCT	4
	SEP	1
	AUG	
36	JUL T	
198	NOS	1
	MAY	
	APR	
	MAR	4111
	FEB	1
	AN	4

3615 M	4815 M	

DATA RETURN FROM MOORING 10.

MOORING 10. UNFILTERED HOURLY DATA

2535M AT MOORING 10.	1000 2 1	PPP 96 -	1700 1	1 DD 97	TADE 7212/12
2535M AT MOORING 10.	1900 3	FEB 86 -	1/00 1	APK 8/.	TAPE /ZIZ/IZ.

	MEAN	SD	MIN	XAM	LENGTH	ENDS AT
s	11.52	6.57	0.80	41.40	10127	(1700 1 APR 87)
U	5.01					(1700 1 APR 87)
v	-2.67					(1700 1 APR 87)
Ť	1.10	0.26	0.38	1.91	10127	(1700 1 APR 87)
P	2597.92					(0000 4 JUN 86)
35	15M AT MOO	RING 10.	1900 3 FI	EB 86 - 1	1700 1 APR	87. TAPE 2278/37.
s	10.01	7.99	0.80	60.20	10127	(1700 1 APR 87)
						(1700 1 APR 87)
V						(1700 1 APR 87)
T						(1700 1 APR 87)
P						(1700 1 APR 87)
		•				
48	15M AT MOO	RING 10.	1900 3 FI	EB 86 - 1	1700 1 APR	87. TAPE 6591/9.
s	12.05	8.59	0.80	50.20	10127	(1700 1 APR 87)
U	4.76	10.0	-42.90	44.20	10127	(1700 1 APR 87)
V	1.31	9.63	-45.30	41.30	10127	(1700 1 APR 87)
${f T}$	0.01	0.12	-0.21	0.24	10127	(1700 1 APR 87)

(2535 M) PRESSURE RECORD TERMINATED EARLY DUE TO POOR QUALITY OF DATA.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 10. LLP FILTERED 6-HOURLY DATA

2535M AT MOORING 10. 0000 5 FEB 86 - 1200 31 MAR 87. TAPE 7212/12

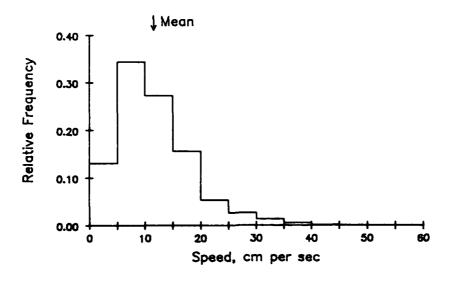
	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
U V T	-2.68 1.10	8.20 0.26	0.41	19.97 1.84	1679	(1200 (1200	31 MAR 87) 31 MAR 87) 31 MAR 87)
P S	2598.38 34.72			3001.07		•	2 JUN 86) 31 MAR 87)
35	15M AT MOOF	RING 10.	0000 5 FI	EB 86 - 1	200 31 M	AR 87.	TAPE 2278/37
U V T P	3.74 -1.23 0.38 3590.93	8.17 0.13	-55.00	26.02 0.77	1679 1679	(1200 (1200	31 MAR 87) 31 MAR 87) 31 MAR 87) 31 MAR 87)
48	15M AT MOOI	RING 10.	0000 5 F	EB 86 - 1	200 31 M	AR 87.	TAPE 6591/9.
U T		9.56 9.10 0.12	-35.83	40.04 32.66 0.23		(1200	31 MAR 87) 31 MAR 87) 31 MAR 87)

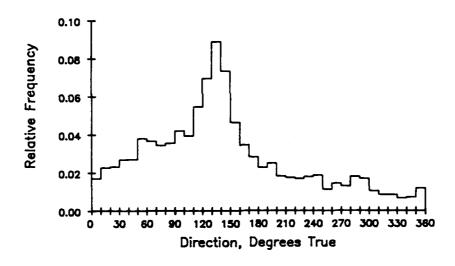
(2535 M) PRESSURE RECORD TERMINATED EARLY DUE TO POOR QUALITY OF DATA.

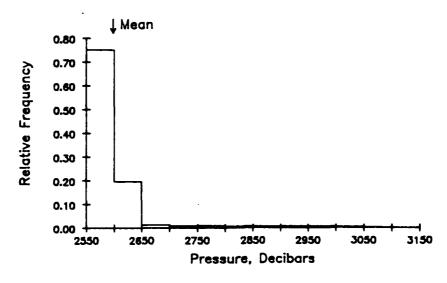
BAD SALINITY POINTS SET TO ZERO.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

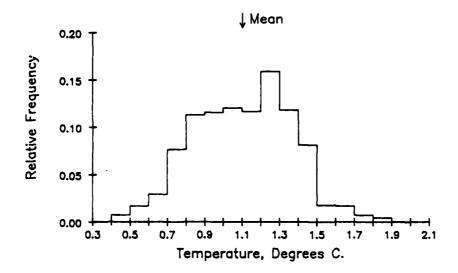
2535 METERS AT MOORING 10. TAPE 7212/12.

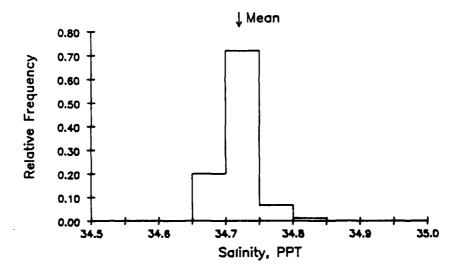




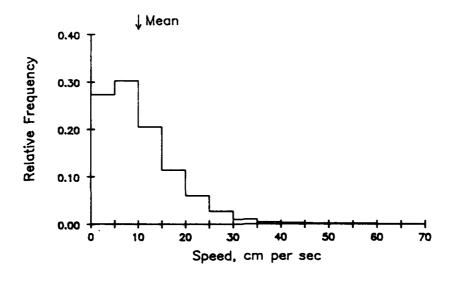


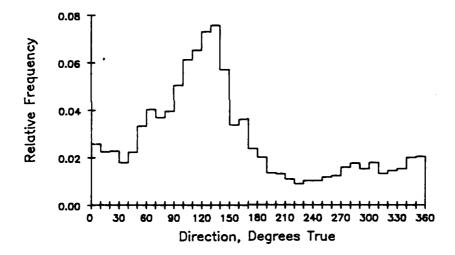
2535 METERS AT MOORING 10. TAPE 7212/12.

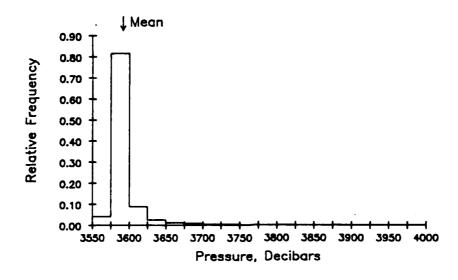




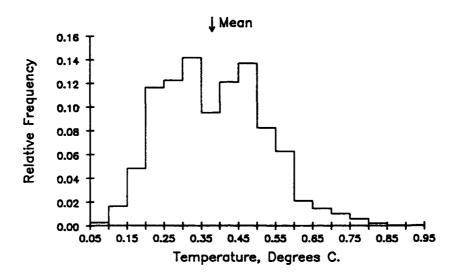
3515 METERS AT MOORING 10. TAPE 2278/37.



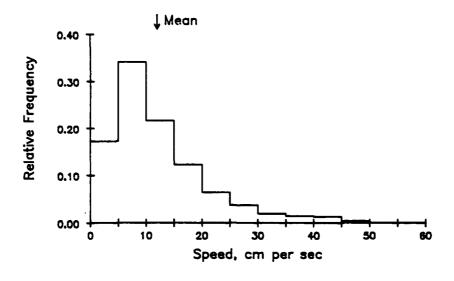


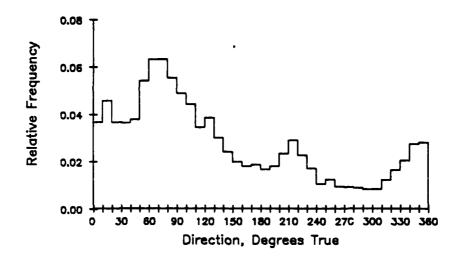


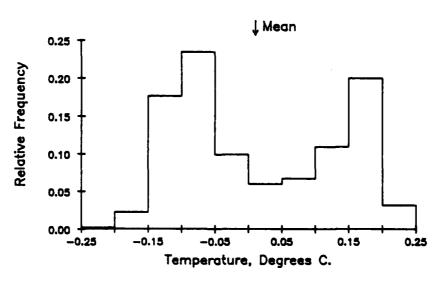
3515 METERS AT MOORING 10. TAPE 2278/37.

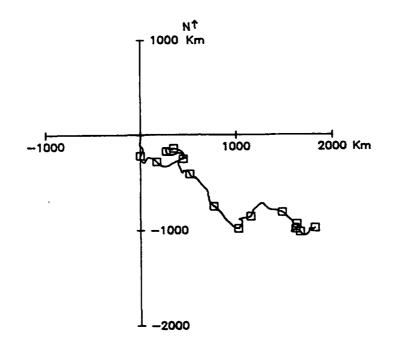


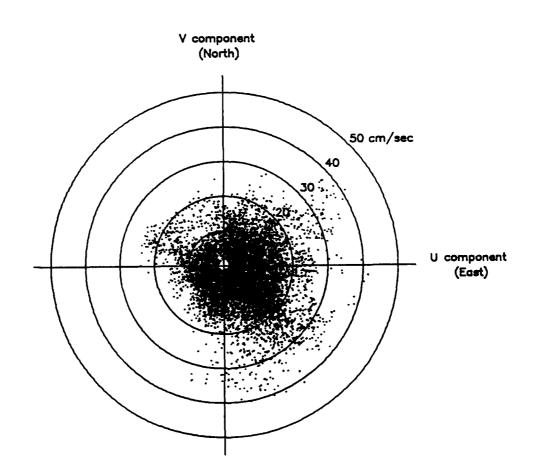
4815 METERS AT MOORING 10. TAPE 6591/9.



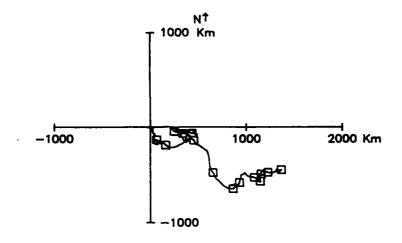


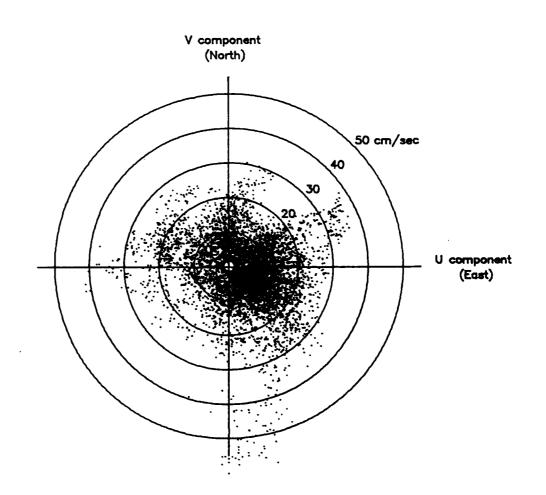


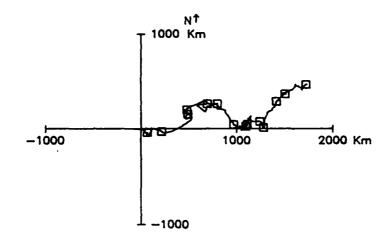


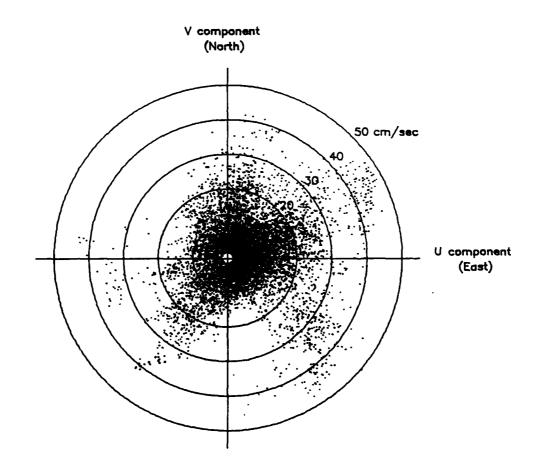


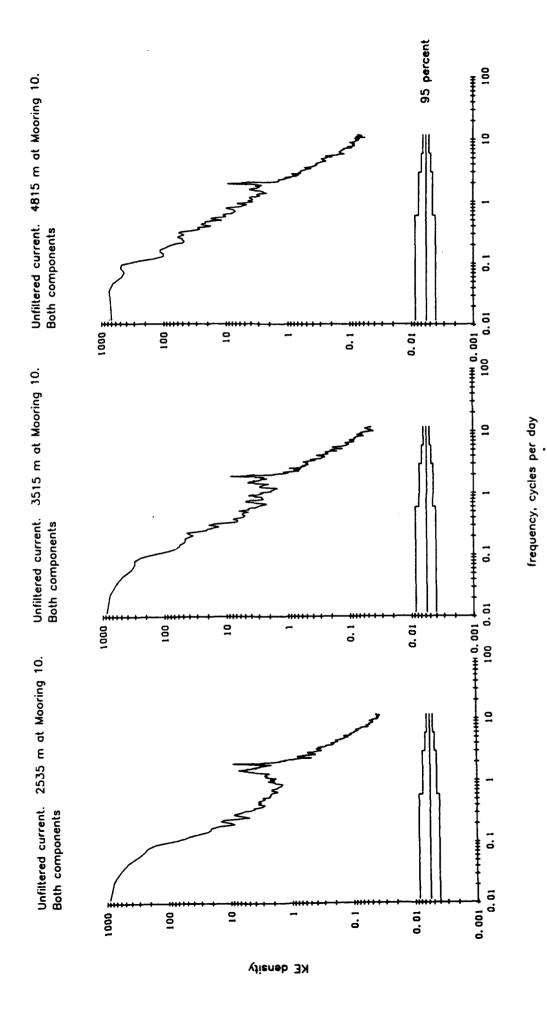
3515M AT MOORING 10. 3 FEB 86 - 1 APR 87. TAPE 2278/37.

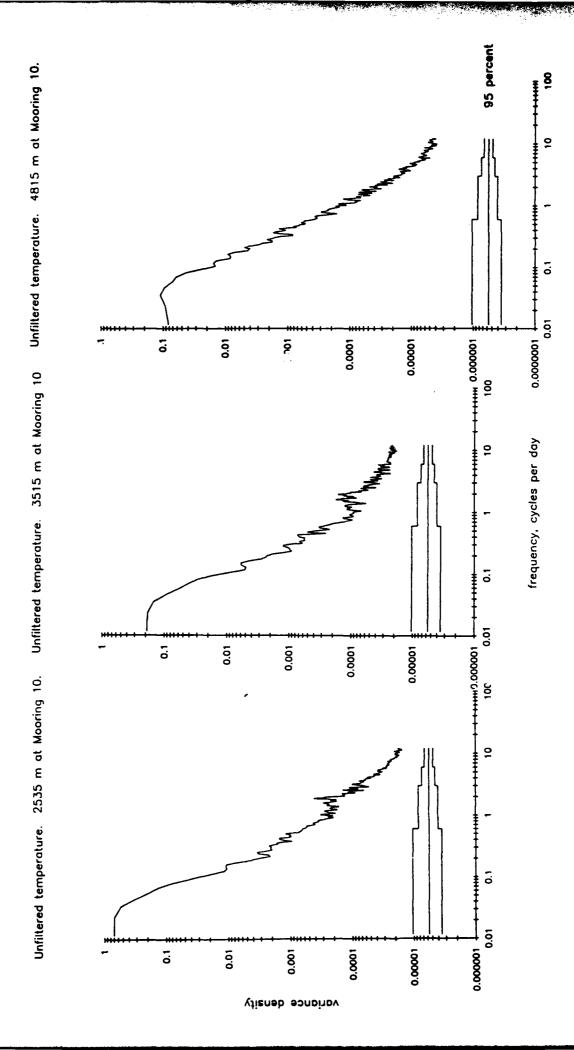


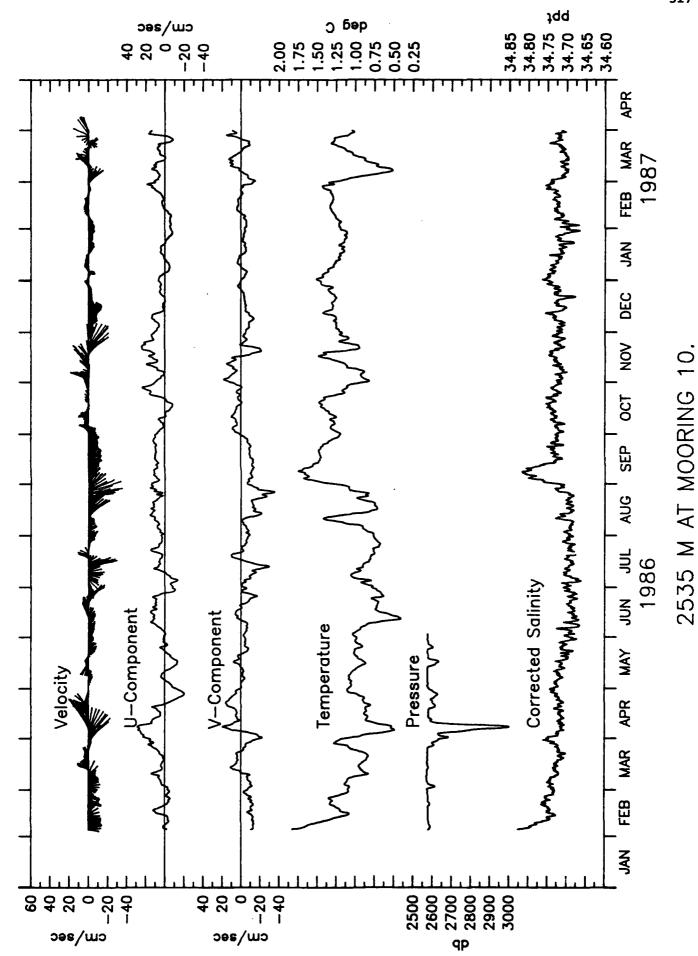


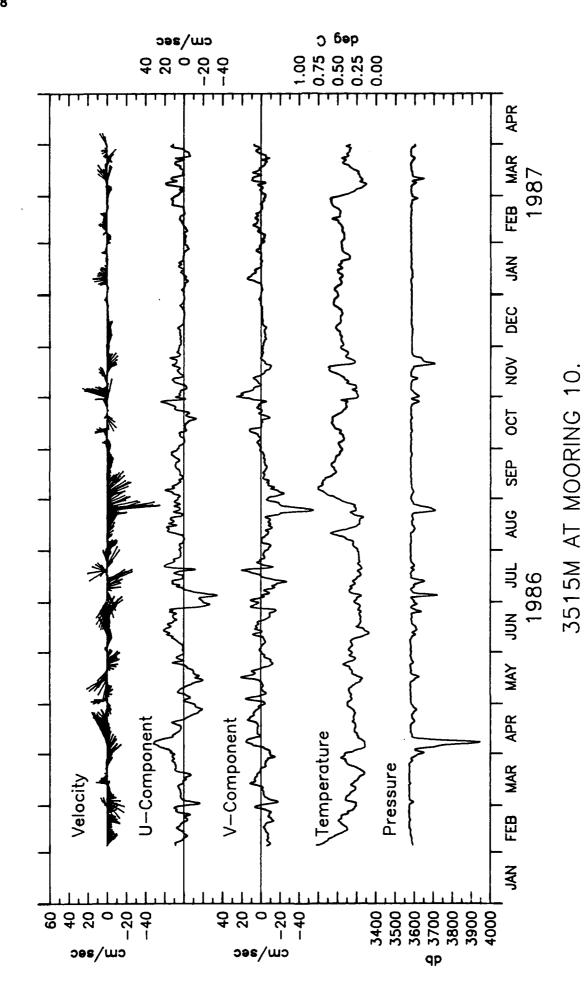


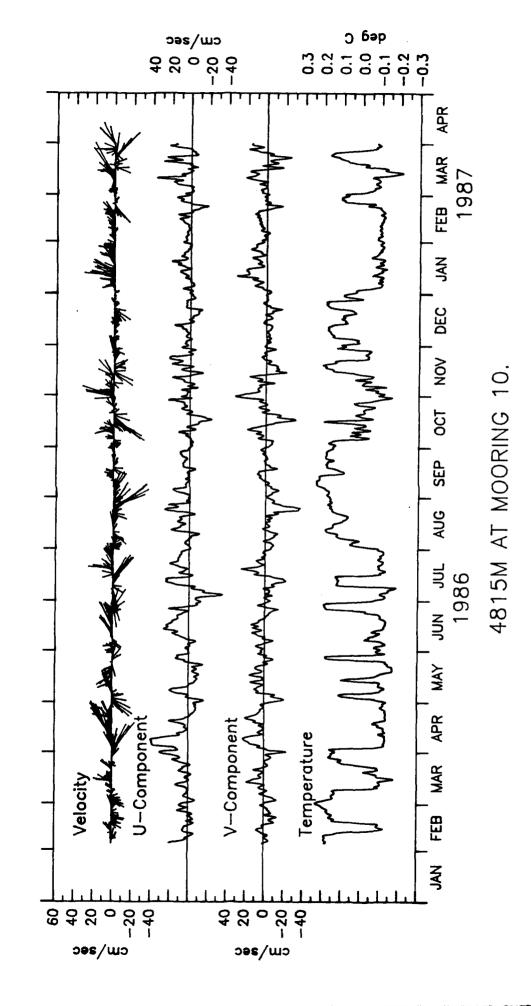


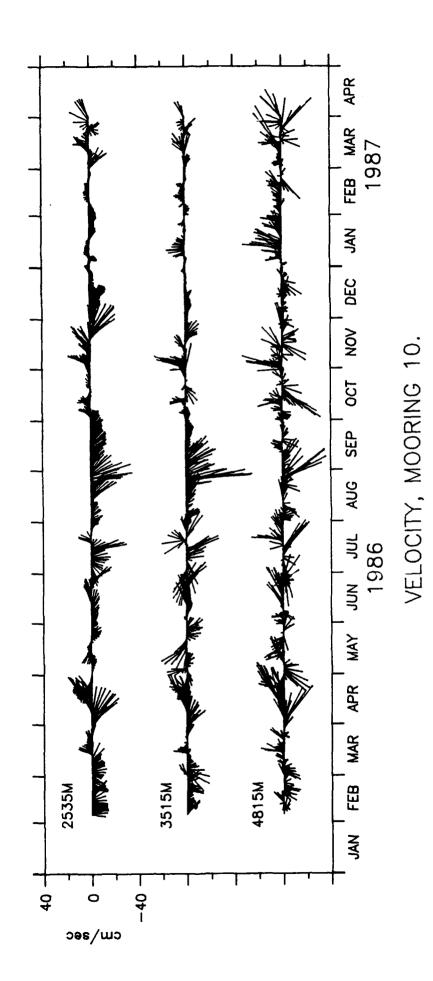


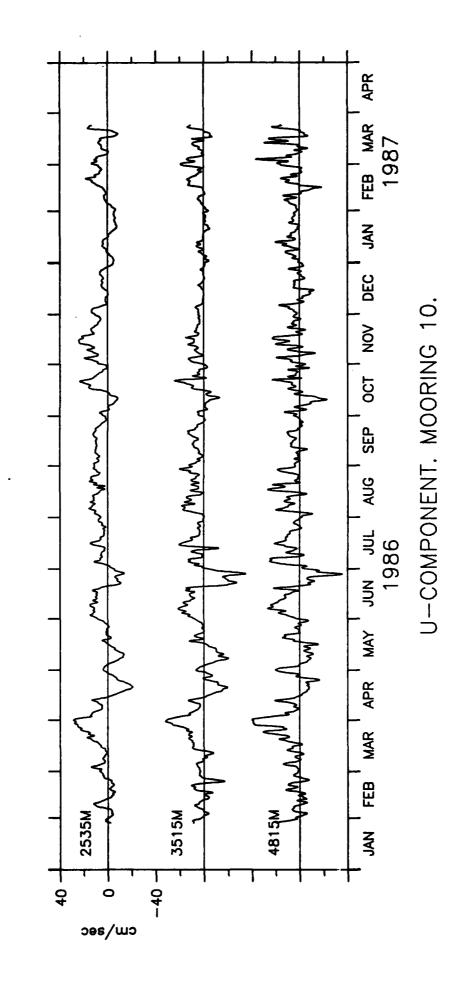


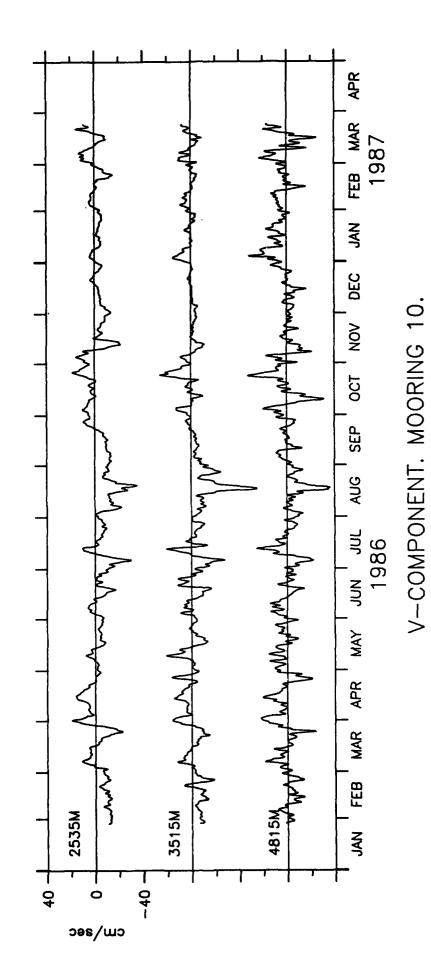


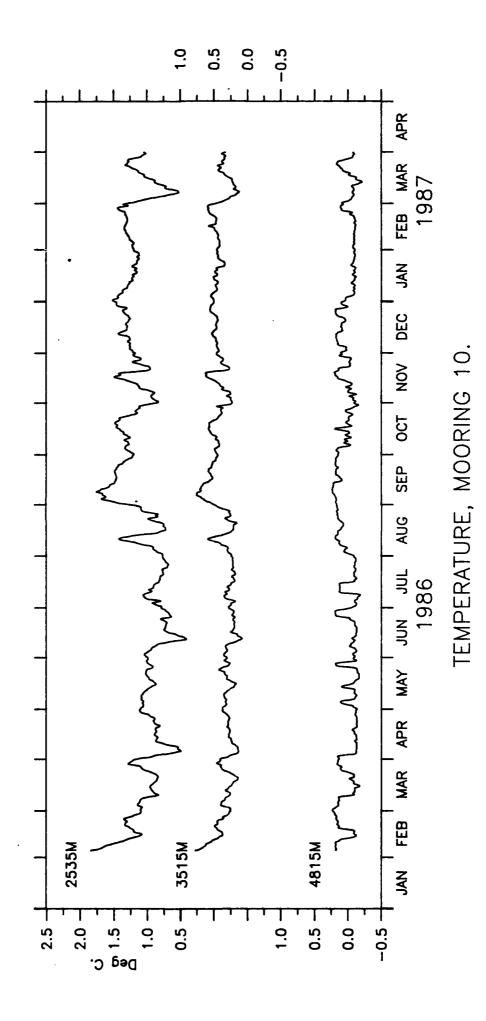


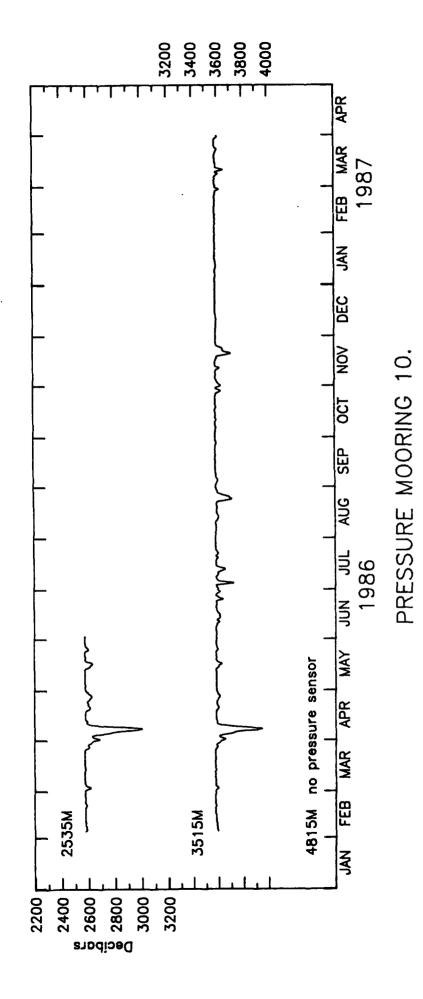












MOORING 11

48°52.44'S, 35°40.67'W

Nete nete	1987 Jan Feb Mar Apr May Jun Jul aug sep oct nov dec Jan Feb Mar Apr	₩ 908 7	3750 M	# 0019	
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DATA RETURN FROM MOORING 11.

<u> Աւսուհուսանայուհայանայան հասանայան հասանայում հայանայում անձայում անձայում աստենայում հասանայում է անձայուն</u>

MOORING 11. UNFILTERED HOURLY DATA.

2805M AT MOORING 11. 1400 4 FEB 86 - 1100 1 APR 87. TAPE 7213/11.

						, , ,
MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
9.54				10102	(1100	1 APR 87)
0.39	9.75	-58.20	33.40	10102	(1100	1 APR 87)
-1.75	6.78	-36.20	34.20	10102	(1100	1 APR 87)
						1 APR 87)
						1 APR 87)
50M AT MOO	RING 11.	1400 4 F	EB 86 - 2	100 11 MA	Y 86. T.	APE 2280/37.
10.33	9.37	0.80	49.50	1735	(2000 1	7 APR 86)
- 2.55	11.48	-45.20	16.20	1728	(1300 1	7 APR 86)
-3.02	6.92	-32.00	13.10	1728	(1300 1	7 APR 86)
3891.25	89.03	3809.00	4477.00	2265		9 MAY 86)
00M NE MOO	DING 11	1400 4 17	ED 06 1	100 1 100		DD 6530 (10
OOM AI MOO	KING II.	. 1400 4 F	EB 86 - 1	100 1 APR	(8 / . TA	PE 6/30/13.
9.55	10.67	0.80	66.80	10102	(1100	1 APR 87)
						0 MAR 87)
						1 APR 87)
	9.54 0.39 -1.75 0.96 2885.37 50M AT MOO 10.33 -2.55 -3.02 0.27 3891.25 0.27 3891.25	9.54 7.30 0.39 9.75 -1.75 6.78 0.96 0.25 2885.37 63.31 50M AT MOORING 11. 10.33 9.37 -2.55 11.48 -3.02 6.92 0.27 0.09 3891.25 89.03 00M AT MOORING 11. 9.55 10.67 2.30 7.11 -2.18 10.96	9.54 7.30 0.80 0.39 9.75 -58.20 -1.75 6.78 -36.20 0.96 0.25 0.19 2885.37 63.31 2842.70 50M AT MOORING 11. 1400 4 F 10.33 9.37 0.80 -2.55 11.48 -45.20 -3.02 6.92 -32.00 0.27 0.09 0.11 3891.25 89.03 3809.00 00M AT MOORING 11. 1400 4 F 9.55 10.67 0.80 2.30 7.11 -37.20 -2.18 10.96 -66.80	9.54 7.30 0.80 63.20 0.39 9.75 -58.20 33.40 -1.75 6.78 -36.20 34.20 0.96 0.25 0.19 1.44 2885.37 63.31 2842.70 3583.00 50M AT MOORING 11. 1400 4 FEB 86 - 2 10.33 9.37 0.80 49.50 -2.55 11.48 -45.20 16.20 -3.02 6.92 -32.00 13.10 0.27 0.09 0.11 0.57 3891.25 89.03 3809.00 4477.00 00M AT MOORING 11. 1400 4 FEB 86 - 1 9.55 10.67 0.80 66.80 2.30 7.11 -37.20 38.60 -2.18 10.96 -66.80 22.70	9.54 7.30 0.80 63.20 10102 0.39 9.75 -58.20 33.40 10102 -1.75 6.78 -36.20 34.20 10102 0.96 0.25 0.19 1.44 10102 2885.37 63.31 2842.70 3583.00 10071 50M AT MOORING 11. 1400 4 FEB 86 - 2100 11 MA 10.33 9.37 0.80 49.50 1735 -2.55 11.48 -45.20 16.20 1728 -3.02 6.92 -32.00 13.10 1728 0.27 0.09 0.11 0.57 2312 3891.25 89.03 3809.00 4477.00 2265 00M AT MOORING 11. 1400 4 FEB 86 - 1100 1 APR 9.55 10.67 0.80 66.80 10102 2.30 7.11 -37.20 38.60 9824 -2.18 10.96 -66.80 22.70 9824	9.54 7.30 0.80 63.20 10102 (1100 0.39 9.75 -58.20 33.40 10102 (1100 -1.75 6.78 -36.20 34.20 10102 (1100 0.96 0.25 0.19 1.44 10102 (1100 2885.37 63.31 2842.70 3583.00 10071 (1100 10.33 9.37 0.80 49.50 1735 (2000 1 -2.55 11.48 -45.20 16.20 1728 (1300 1 -3.02 6.92 -32.00 13.10 1728 (1300 1 0.27 0.09 0.11 0.57 2312 (2100 1 3891.25 89.03 3809.00 4477.00 2265 (2200 1 0.00 AT MOORING 11. 1400 4 FEB 86 - 1100 1 APR 87. TARESTER STANDARD ST

(2805 M) SPEED BRIDGED 7007 - 7026 (1200 23 NOV 86 - 0700 24 NOV 86). PRESSURE OFFSCALE, GAPS IN LINES: 408 - 417 (1300 21 FEB 86 - 2200 21 FEB 86) 426 - 435 (0700 22 FEB 86 - 1600 22 FEB 86)

10001-10011 (0600 28 MAR 87 - 1600 28 MAR 87)

- (3750 M) ALL DATA CHANNELS WENT BAD EARLY IN INSTALLATION, POSSIBLY DUE TO LOW BATTERY.
- (5100 M) COMPASS MALFUNCTION CAUSED SHORT DIRECTION RECORD.
- (Speed, u, and v are given in cm/sec, Temperature in .C, Pressure in DB).

MOORING 11. LLP FILTERED 6 HOURLY DATA

2805M AT MOORING 11.	1800 5 FEB 86 -	0600 31 MAR 87.	TAPE 7213/11.
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	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
U	0.47	9.32	-43.79	28.76	1675	(0600	31 MAR 87)
V	-1.76	6.25	-25.45	29.39	1675		31 MAR 87)
	0.96						
P							27 MAR 87)
37	50M AT MOO	RING 11.	1800 5 FE	B 86 - 1	800 10 M	AY 86.	TAPE 2280/37.
TT	-2.58	11.25	-38 46	10.89	279	(0600	16 APR 86)
							16 APR 86)
Ť							10 MAY 86)
							•
P	3892.30	87.95	3809.66	4350.17	369	(1800	8 MAY 86)
51	OOM AT MOO.	RING 11.	1800 5 FE	EB 86 - 0	600 31 M	IAR 87.	TAPE 6730/13.
บ	2.34	6.43	-24.94	29.17	1629	(1800	19 MAR 87)
V	-2.11	10.33	-60.04	15.79	1629	(1800	19 MAR 87)
T			-0.09				31 MAR 87)

(2805 M) SPEED BRIDGE IN UNFILTERED RECORD PRESSURE OFFSCALE, GAPS IN UNFILTERED RECORD, LLP GAPS LINES:

61 - 72 (1800 20 FEB 86 - 1200 23 FEB 86)

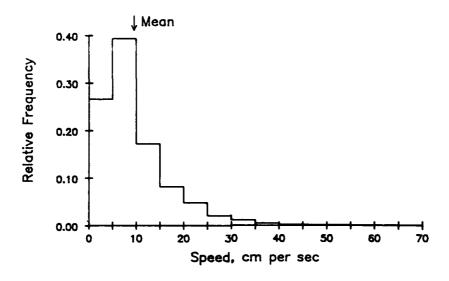
1658 - 1675 (0600 27 MAR 87 - 0600 31 MAR 87)

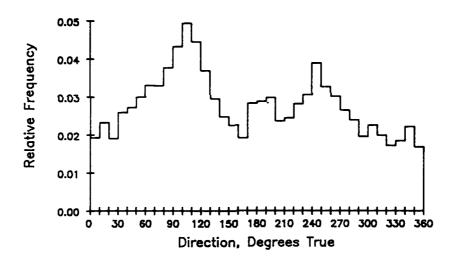
(3750 M) ALL DATA CHANNELS WENT BAD EARLY IN INSTALLATION, LOW BATTERY

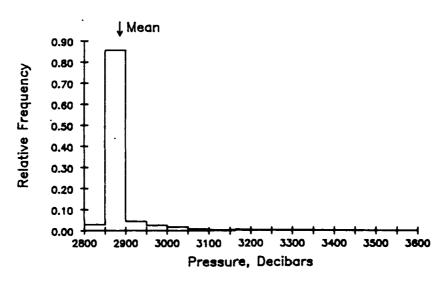
(5100 M) COMPASS MALFUNCTION CAUSED SHORT DIRECTION RECORD

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

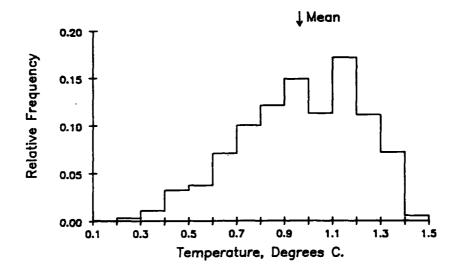
2805 METERS AT MOORING 11. TAPE 7213/11.

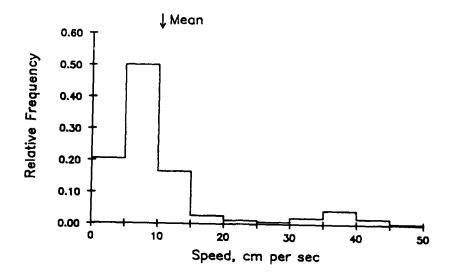


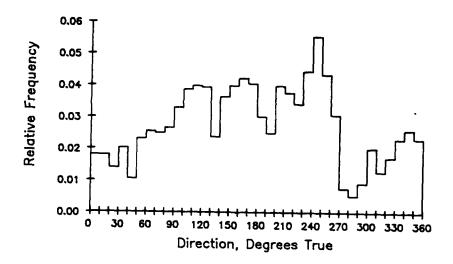


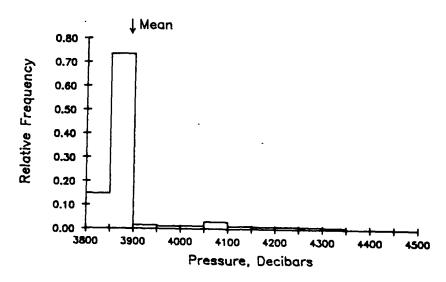


2805 METERS AT MOORING 11. TAPE 7213/11.

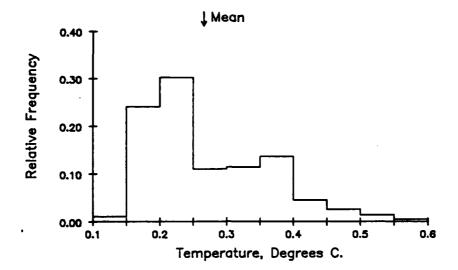




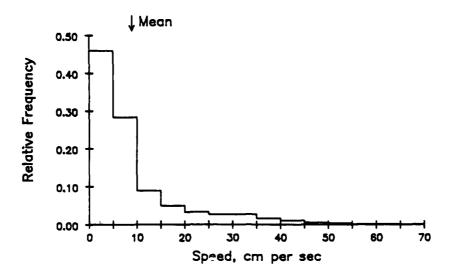


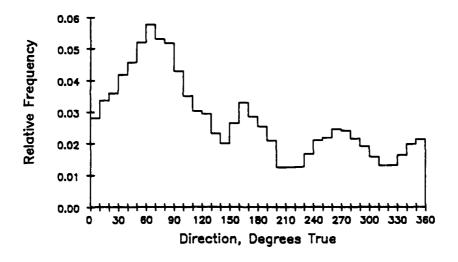


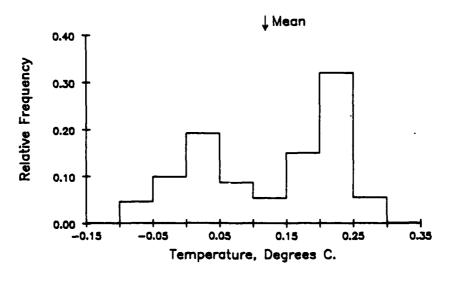
3750 METERS AT MOORING 11. TAPE 2280/37.

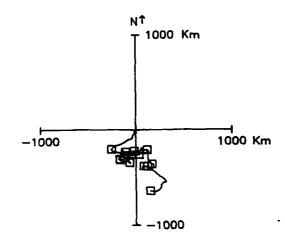


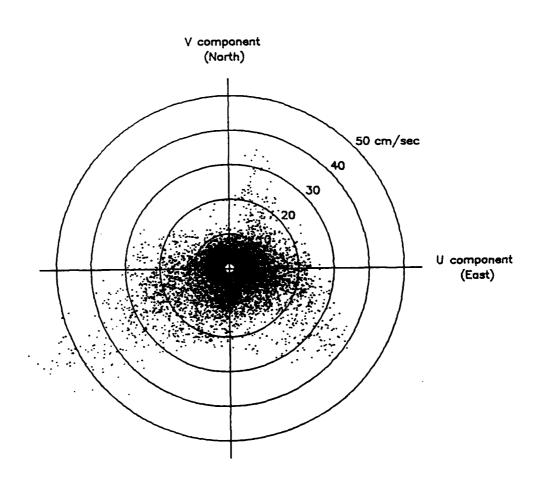
5100 METERS AT MOORING 11. TAPE 6730/13.



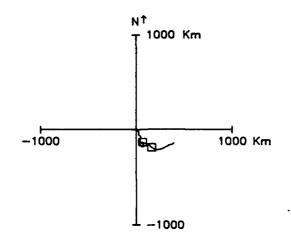


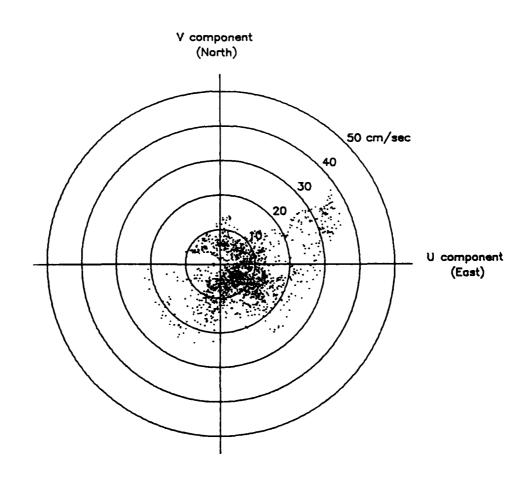


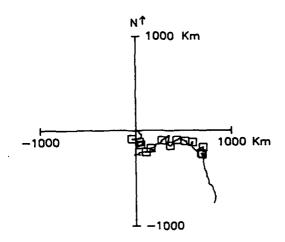


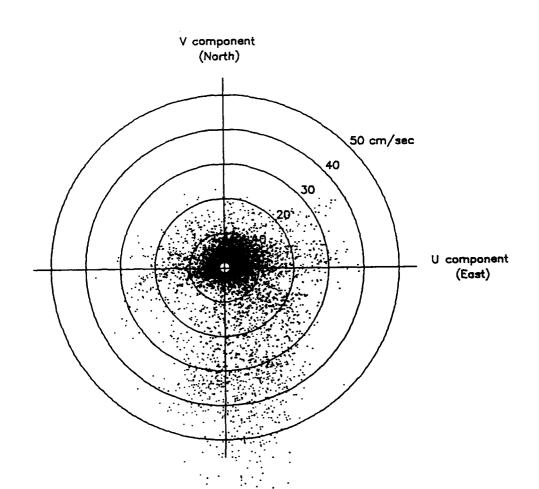


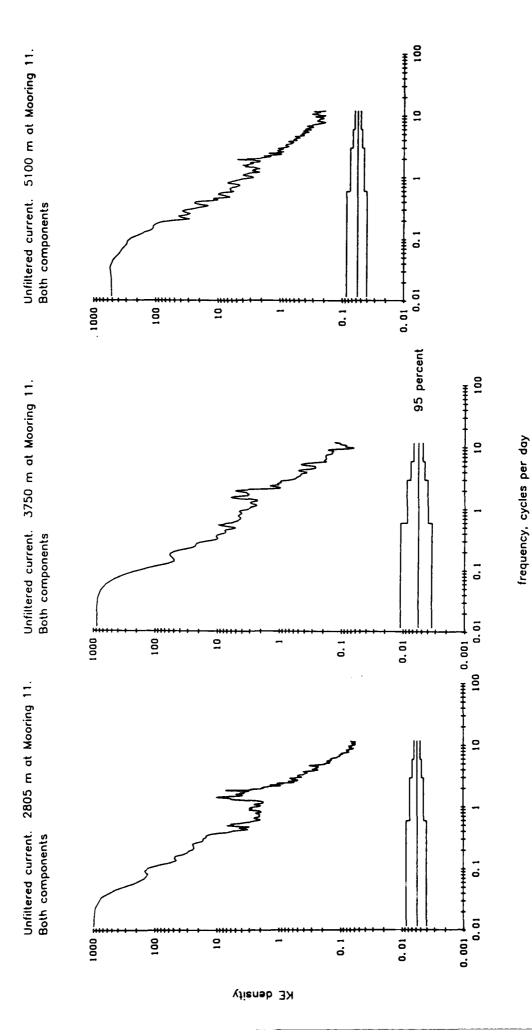
3750M AT MOORING 11. 4 FEB 86 - 17 APR 86. TAPE 2280/37.

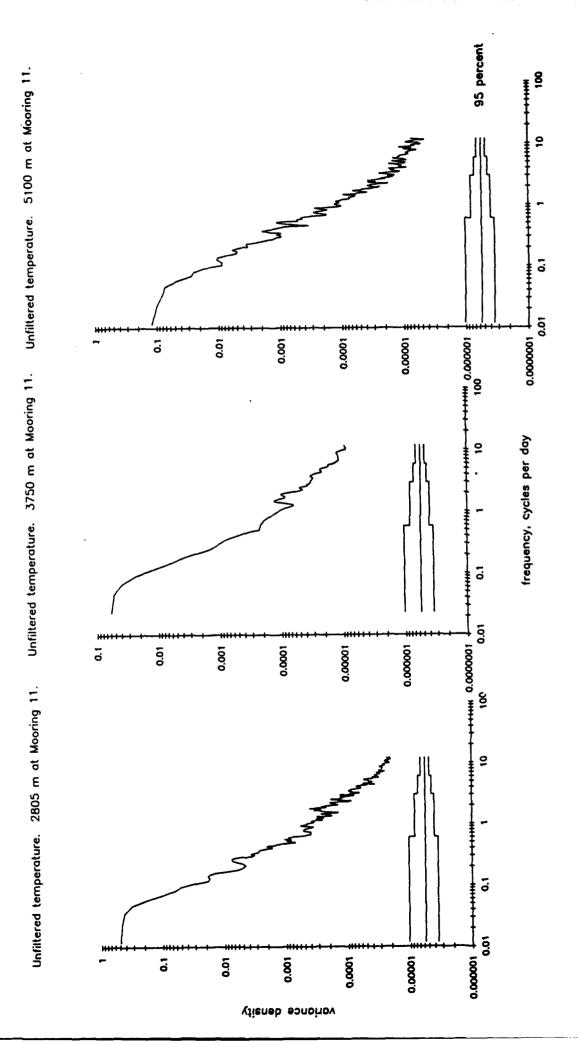


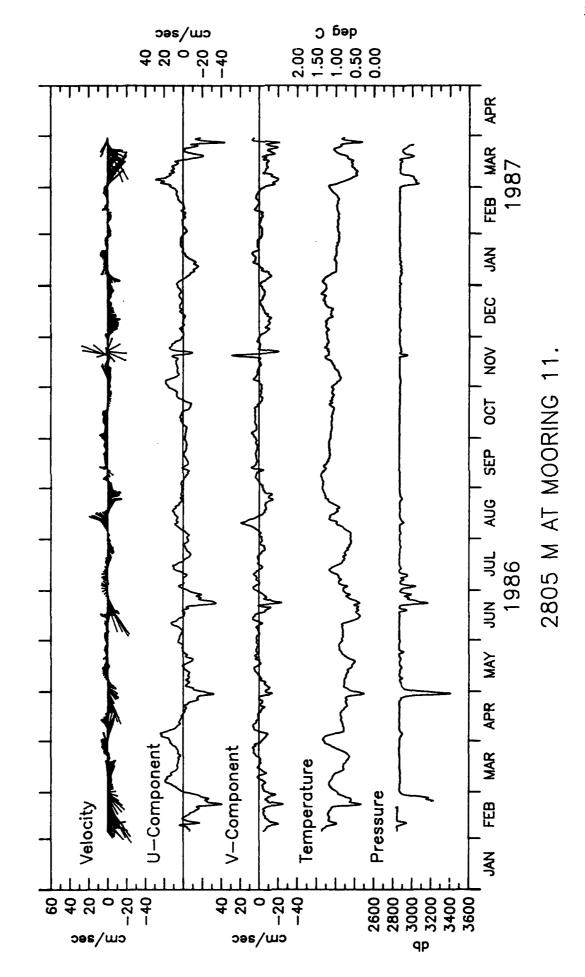


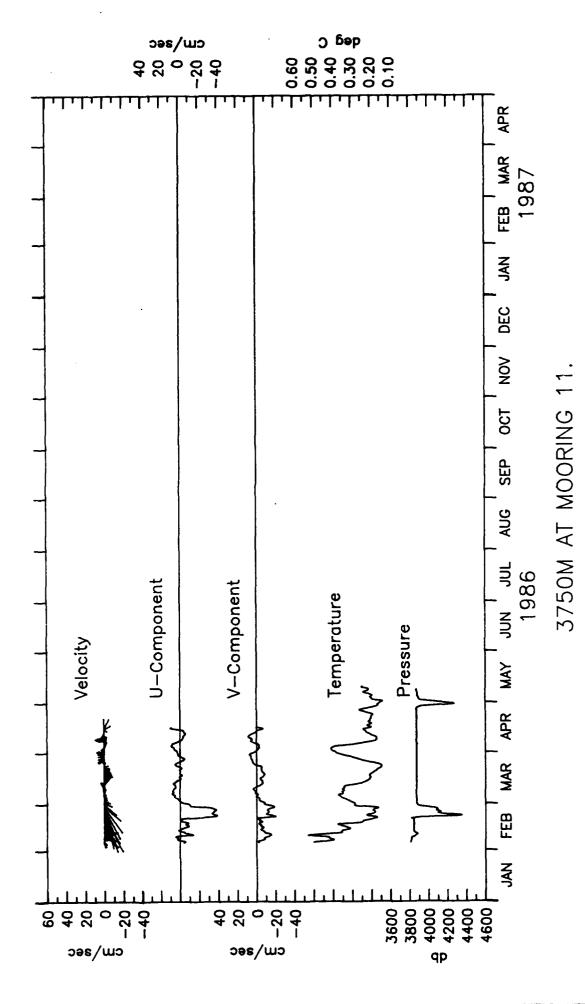


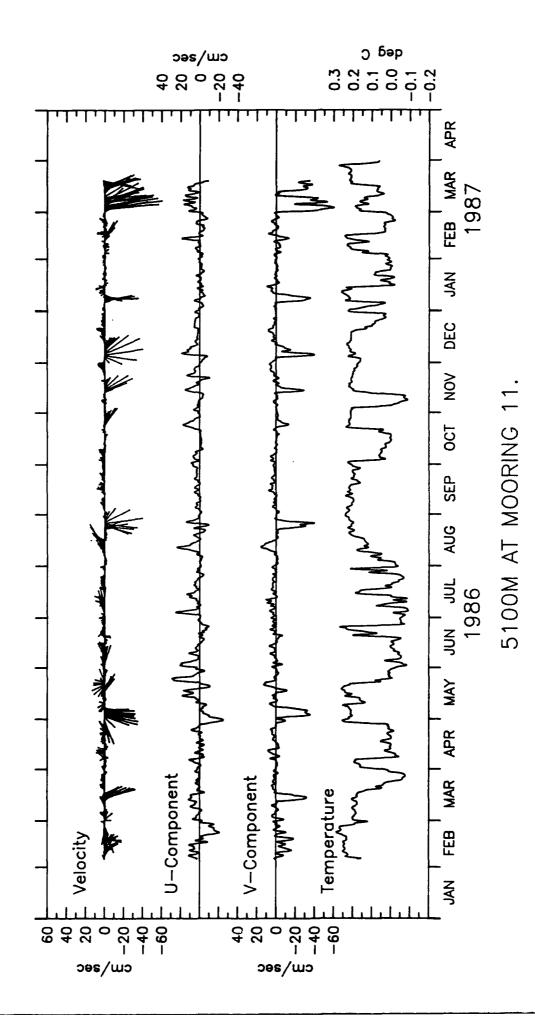


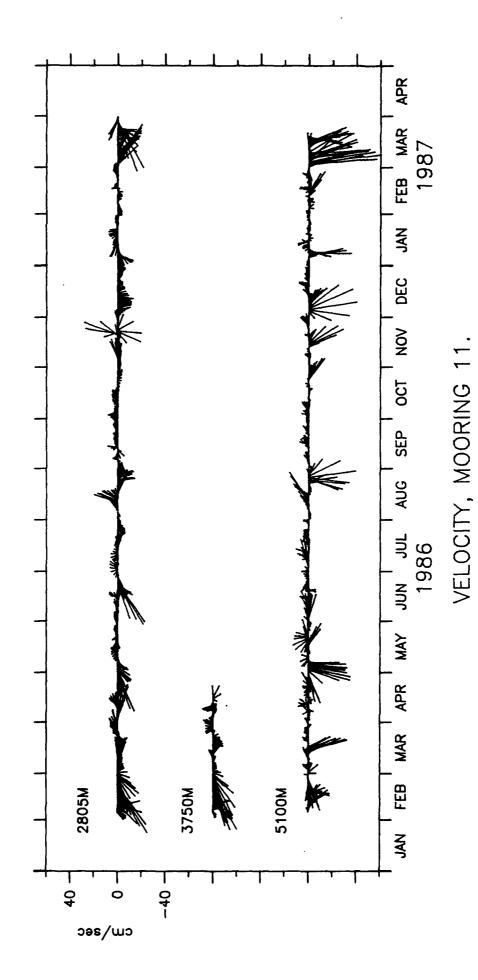


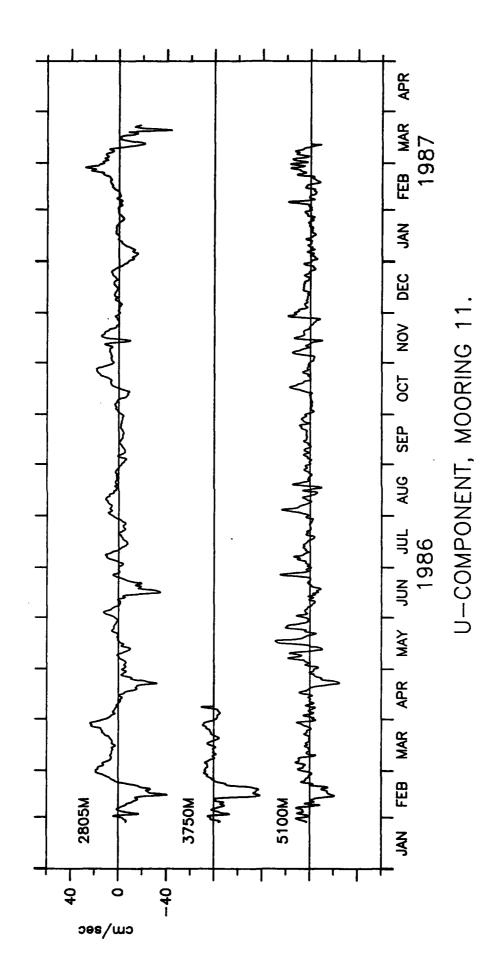


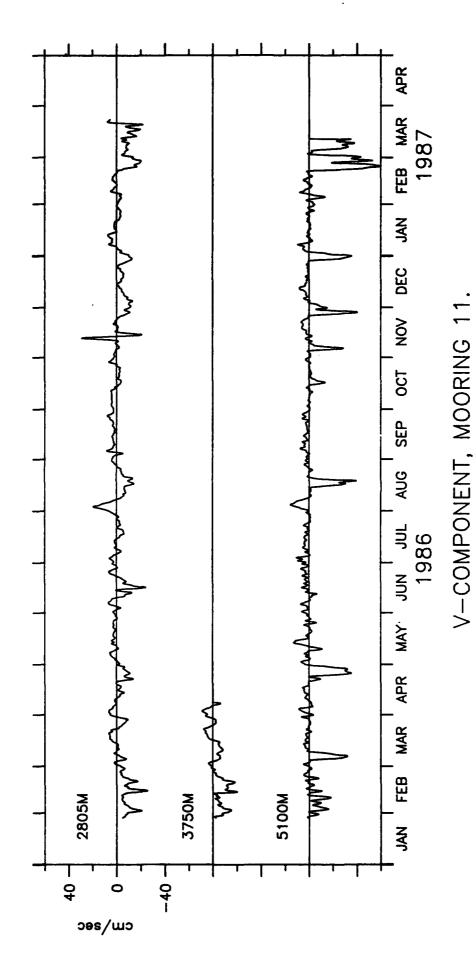


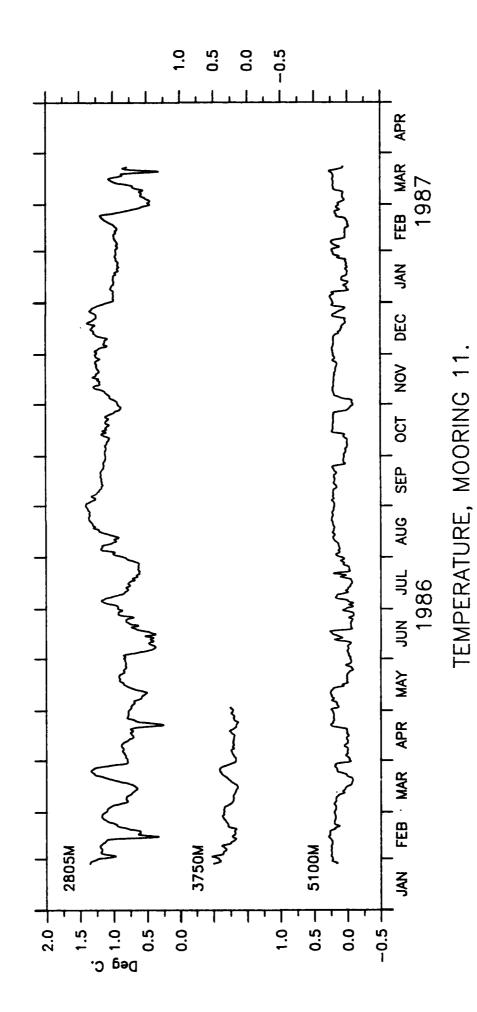


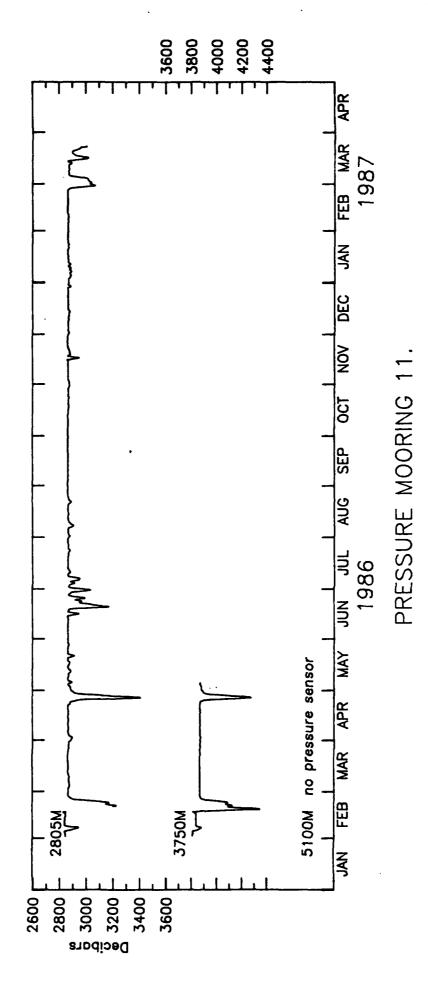












MOORING 12

48°50.85'S, 35°09.30'W

1987 FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR	M 226		1715 M	Z490 M	3470 M	The state of the s
JAN	Ø 4	• ► 4 B	ν ~ − σ <u>γ</u>	N OF 2	-e« 8-	Ē.

MOORING 12. UNFILTERED HOURLY DATA.

955M AT MOORING 12. 2200 4 FEB 86 - 1600 4 APR 87. TAPE 7214/12.

25.	J 11001.					, ,
	MEAN	SD	MIN	MAX	LENGTH	ENDS AT
S	20.30	10.63	0.80	67.50	9798	(1600 4 APR 87)
Ū	1.75		-50.20	59.30	9798	
v	-0.84	11.70	-42.20	39.80	9798	(1600 4 APR 87)
Ť	2 30	0 19	1.73	2.76	10171	(1600 4 APR 87) (1600 4 APR 87)
P	2.33	53 25	964 90	1549.80	10171	(1600 4 APR 87)
F	993.10	33.63	304.30	1347.00	101/1	(2000 1 1121 07)
17	15M AT MOO	RING 12.	2200 4 FE	EB 86 - 1	600 4 APR	87. TAPE 4586/5.
s	13.58	7.63	0.80	52.80	10171	(1600 4 APR 87) (1600 4 APR 87) (1600 4 APR 87)
Ū	0.18	13.28	-34.20	45.30	10171	(1600 4 APR 87)
v	-0.66	8.11	-35.70	29.70	10171	(1600 4 APR 87)
T	2.12	0.32	1.20	2.88	10171	·(1600 4 APR 87)
P	1757.45	37.79	1735.20	2142.30	10142	(1600 4 APR 87)
24	90M AT MOO	RING 12.	2200 4 FE	EB 86 - 1	600 4 APR	87. TAPE 7351/14.
s	9.86	5.47	0.80	36.20	10171	(1600 4 APR 87)
U	-1.03	9.50	-33.10	33.90	10171	(1600 4 APR 87) (1600 4 APR 87)
V	-0.57	5.95	-27.30	17.90	10171	(1600 4 APR 87) (1600 4 APR 87) (1600 4 APR 87)
T	1.31	0.30	0.60	2.13	10171	(1600 4 APR 87)
P	2536.76	26.87	2524.90	2799.90	10171	(1600 4 APR 87)
3470M AT MOORING 12. 2200 4 FEB 86 - 1600 4 APR 87. TAPE 6733/10.						
					·	
s	9.10	6.19	0.80	52.60	10171	(1600 4 APR 87)
Ū	-3.69	8.70	-51.40	28.40	10171	(1600 4 APR 87) (1600 4 APR 87)
V	-0.32	5.63	-38.80	21.90	10171	(1600 4 APR 87)
T		0.21				(1600 4 APR 87)
						•

- (955 M) GAPS IN SPEED, U, AND V RECORDS LINES: 4068 - 4440 (0900 24 JUL 86 - 2100 8 AUG 86)
- (1715 M) PRESSURE OFFSCALE, GAP IN RECORD LINES: 9523 9551 (1600 8 MAR 87 2000 9 MAR 87)
- (3470 M) SPEED BRIDGED LINES: 280 - 366 (1300 16 FEB 86 - 0300 20 FEB 86)
- (Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 12. LLP FILTERED 6 HOURLY DATA

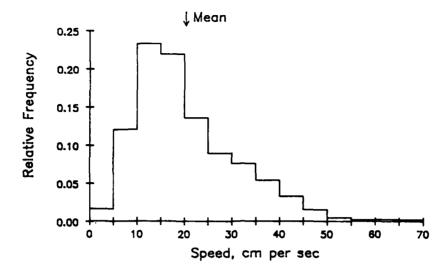
955M AT MOORING 12. 0000 6 FEB 86 - 1200 3 APR 87. TAPE 7214/12.

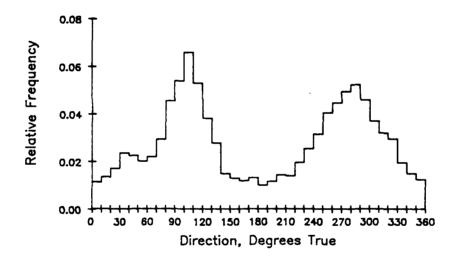
	MEAN	SD	MIN	MAX	LENGTH	ENDS	AT
U V T P S	1.87 -0.87 2.39 993.10 34.73	19.35 11.29 0.19 53.46 2.14	-43.29 -38.05 1.85 966.40 15 34.57	56.41 36.50 2.69 535.84 34.87	1617 1617 1687 1687 1687	(1200 3 (1200 3 (1200 3	APR 87) APR 87) APR 87) APR 87) APR 87)
17	15M AT MOOR	ING 12.	0000 6 FEB	86 - 120	00 3 APR	87 TAPE	4586/5.
U V T P S	0.25 -0.66 2.12 1756.05 34.79	13.01 7.69 0.31 31.89 2.69	-28.85 -30.87 1.28 1735.48 19 34.71		1687 1687 1687 1674 1636	(1200 3 (1200 3 (1200 3	APR 87) APR 87) APR 87) APR 87) APR 87)
24	90M AT MOOR	ING 12.	0000 6 FEB	86 - 120	00 3 APR	87 TAPE	7351/14.
U V T P S	-0.99 -0.55 1.31 2536.75 34.74		-25.37 -22.71 0.65 2523.18 27 34.69	26.55 11.48 2.02 798.06 34.80	1687 1687 1687 1687 1687	(1200 3 (1200 3 (1200 3	APR 87) APR 87) APR 87) APR 87) APR 87)
34	70M AT MOOR	RING 12.	0000 6 FEB	86 - 120	00 3 APR	87 TAPE	6733/10.
U V T	-3.63 -0.33 0.40	8.04 4.52 0.20	-39.78 -33.02 0.04	22.31 10.34 0.90	1687 1687 1687	(1200 3	APR 87) APR 87) APR 87)

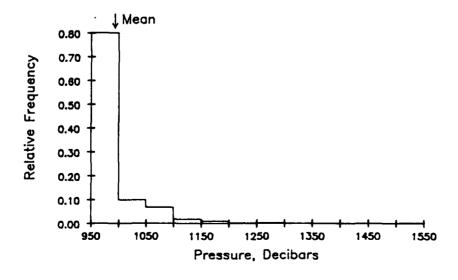
- (955 M) U & V GAPS IN UNFILTERED RECORD, LLP LINES: 671 - 740 (1200 23 JUL 86 - 1800 9 AUG 87)
- (1715 M) PRESSURE OFFSCALE, GAP IN UNFILTERED RECORD, LLP LINES: 1580 1592 (1800 7 MAR 87 1800 10 MAR 87) GAPS IN SALINITY RECORD, BAD VALUES REMOVED
- (2490 M) SPEED RECORD BRIDGED IN UNFILTERED RECORD.

(Speed, u, and v are given in cm/sec, Temperature in 'C, Pressure in DB, and Corrected Salinity in ppt.)

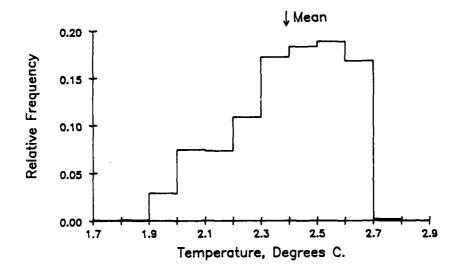
955 METERS AT MOORING 12. TAPE 7214/12.

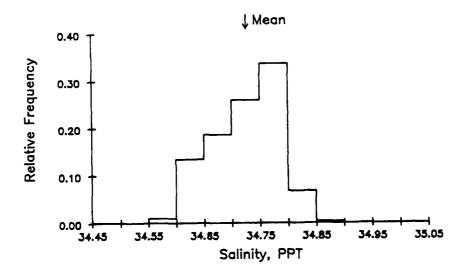




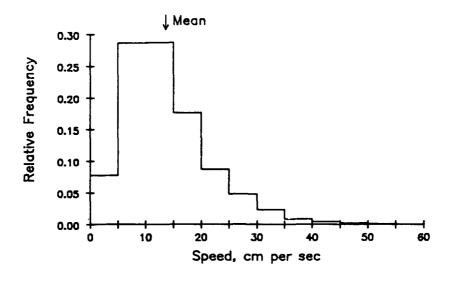


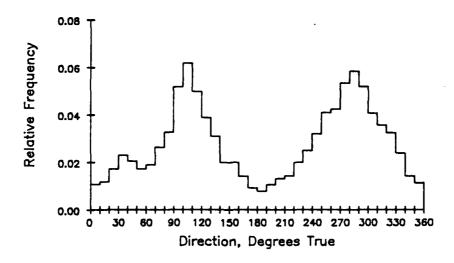
955 METERS AT MOORING 12. TAPE 7214/12.

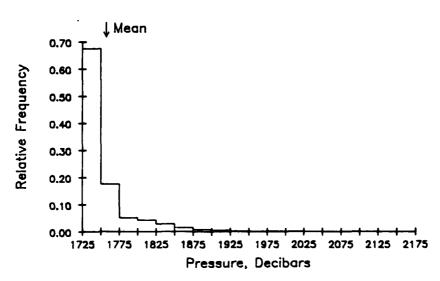




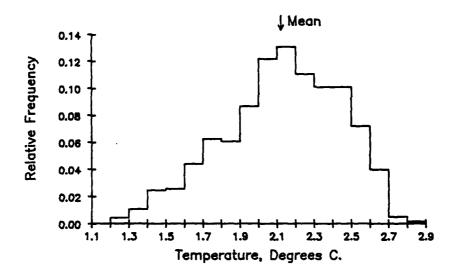
1715 METERS AT MOORING 12. TAPE 4586/5.

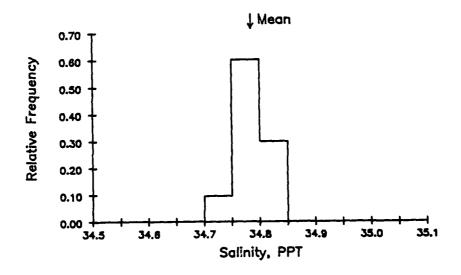


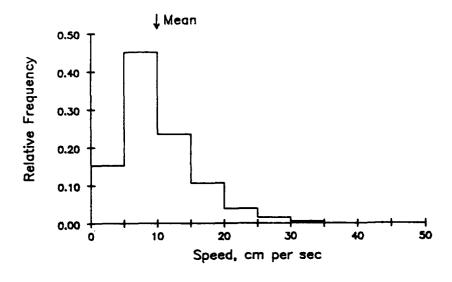


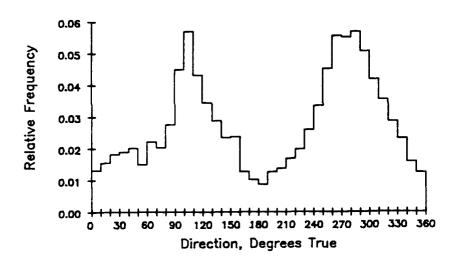


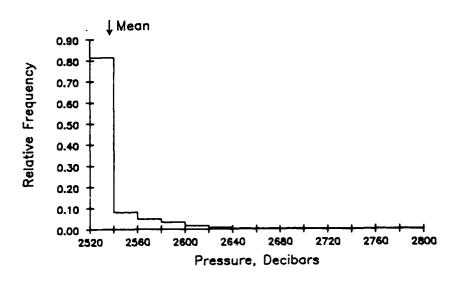
1715 METERS AT MOORING 12. TAPE 4586/5.



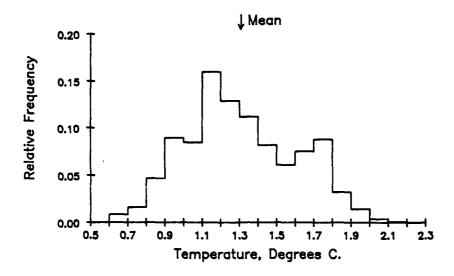


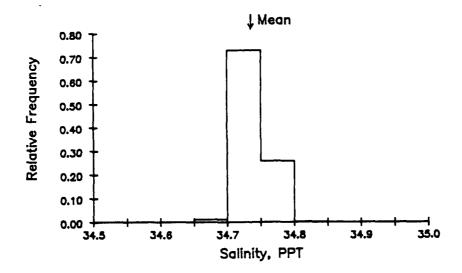




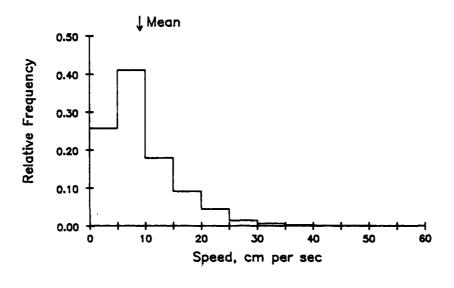


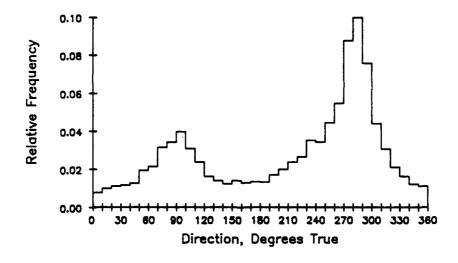
2490 METERS AT MOORING 12. TAPE 7351/14.

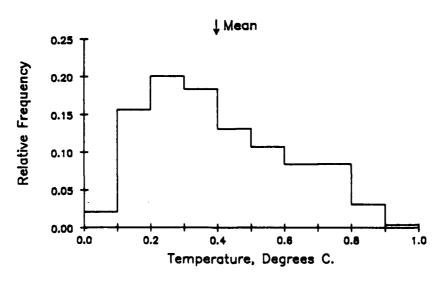




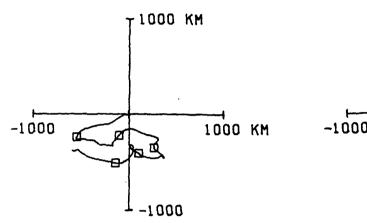
3470 METERS AT MOORING 12. TAPE 6733/10.

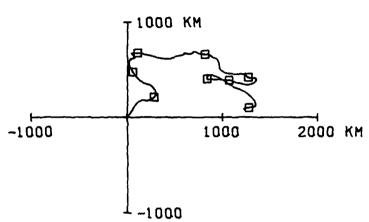






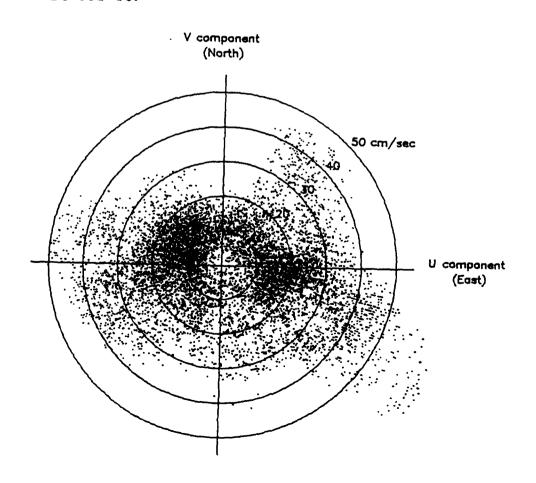
NŤ



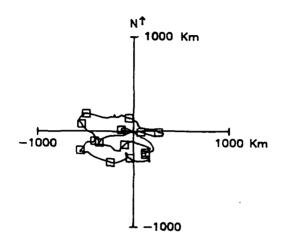


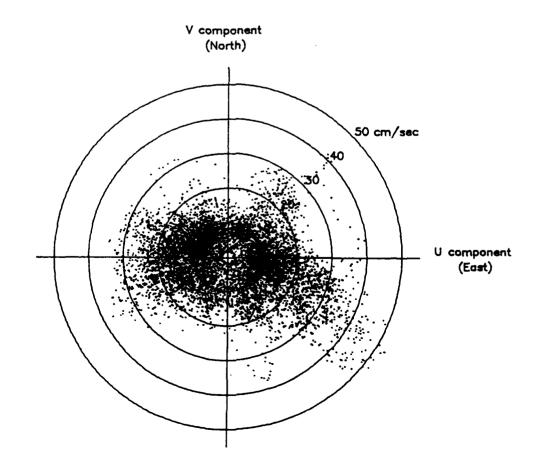
4 FEB 86 - 24 JUL 86.

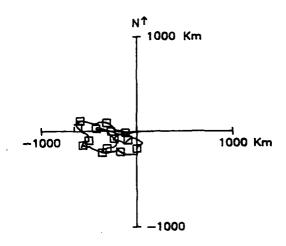
8 AUG 86 - 4 APR 87.

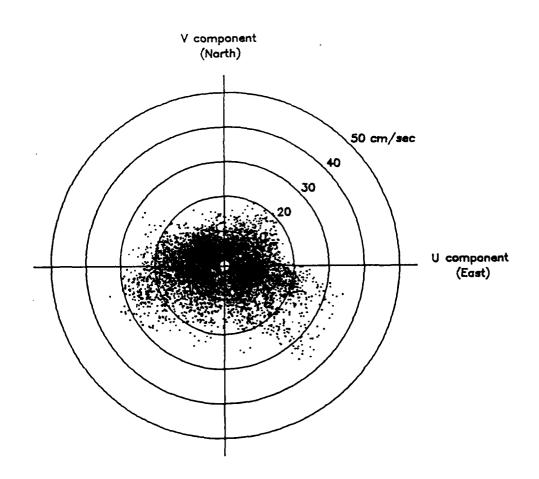


1715M AT MOORING 12. 4 FEB 86 - 4 APR 87. TAPE 4586/5.

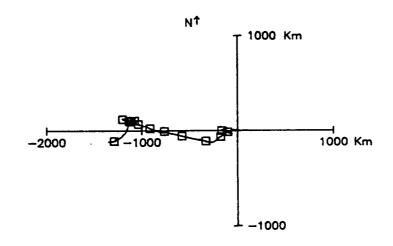


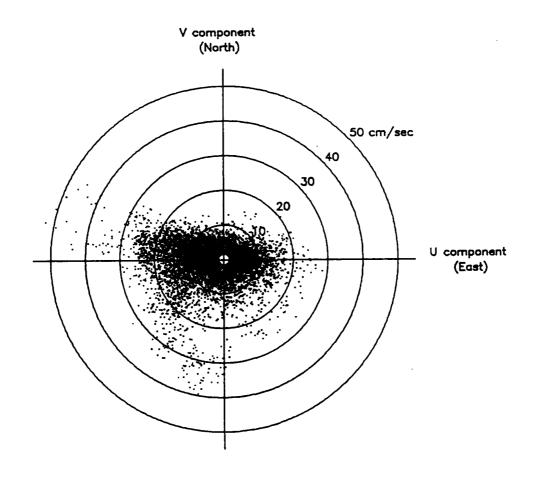


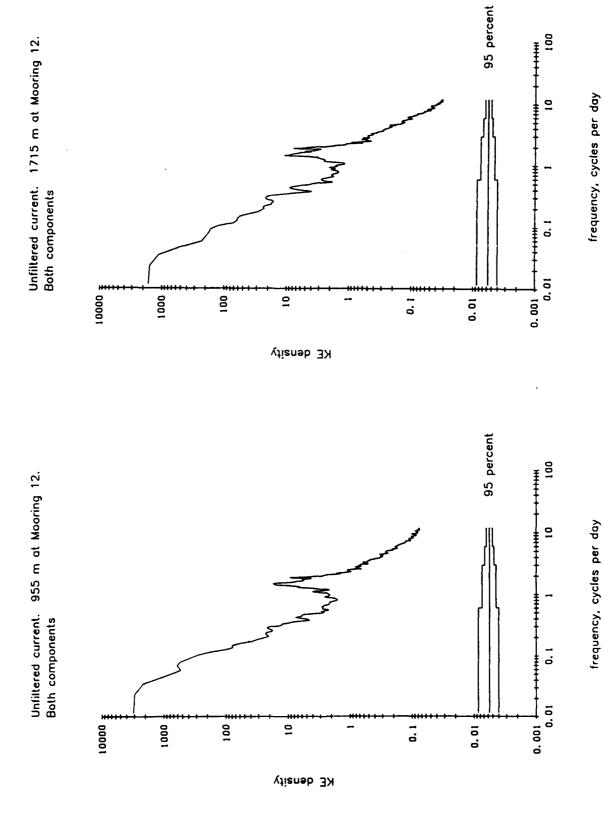




3470M AT MOORING 12. 4 FEB 86 - 4 APR 87. TAPE 6733/10.





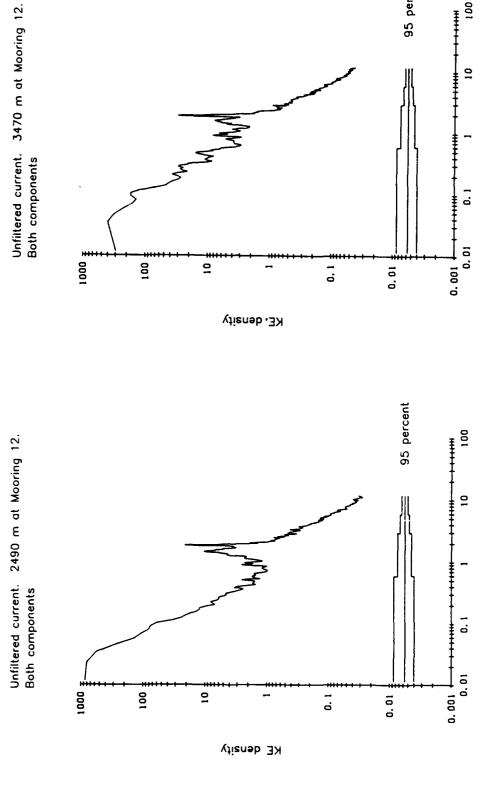


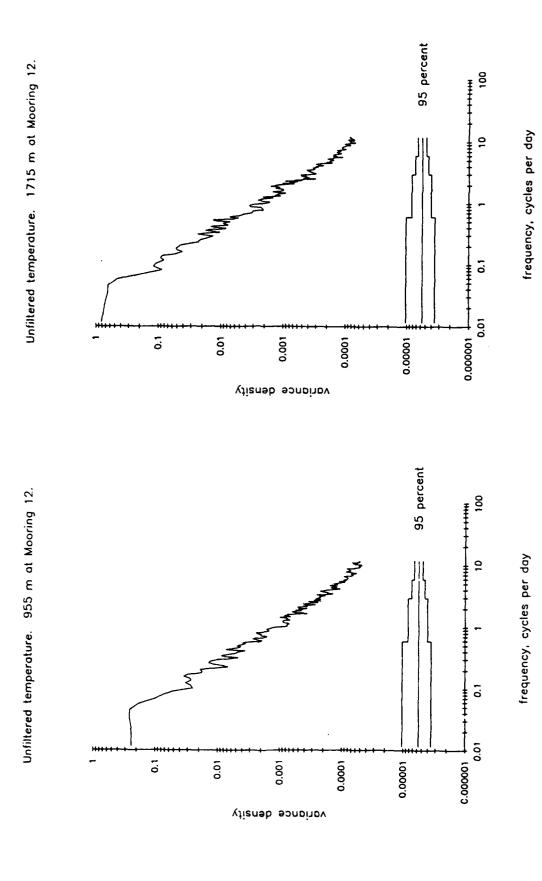
frequency, cycles per day

frequency, cycles per day

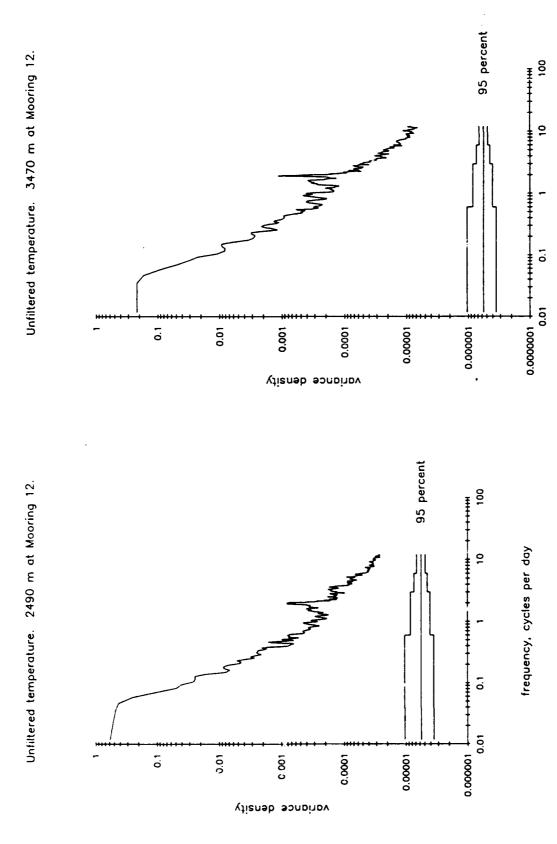
0, 01

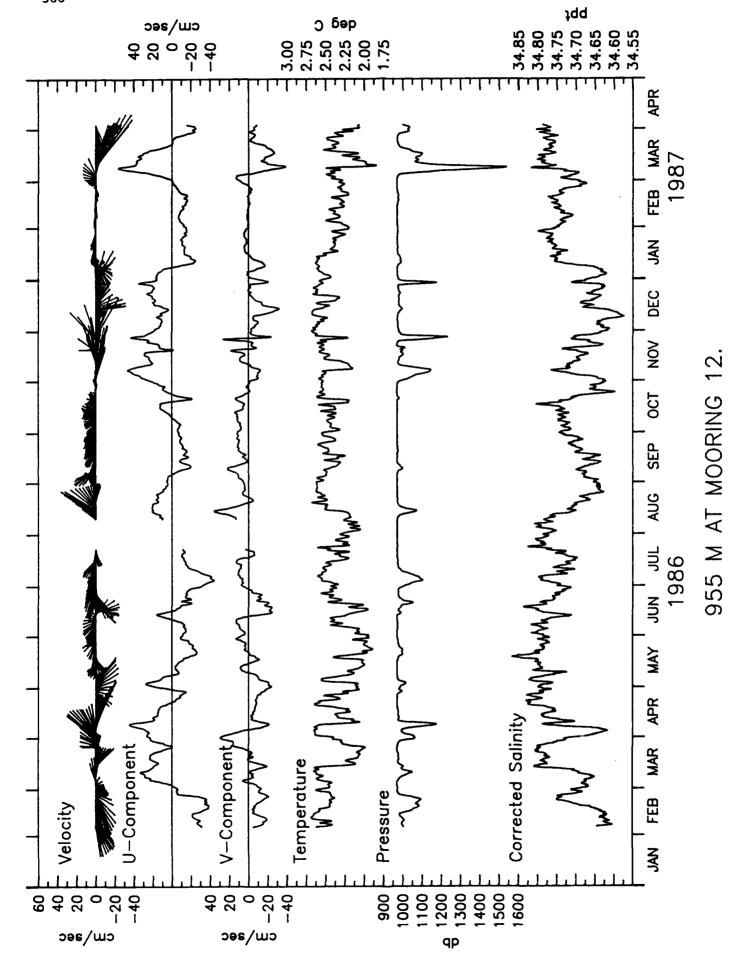
95 percent

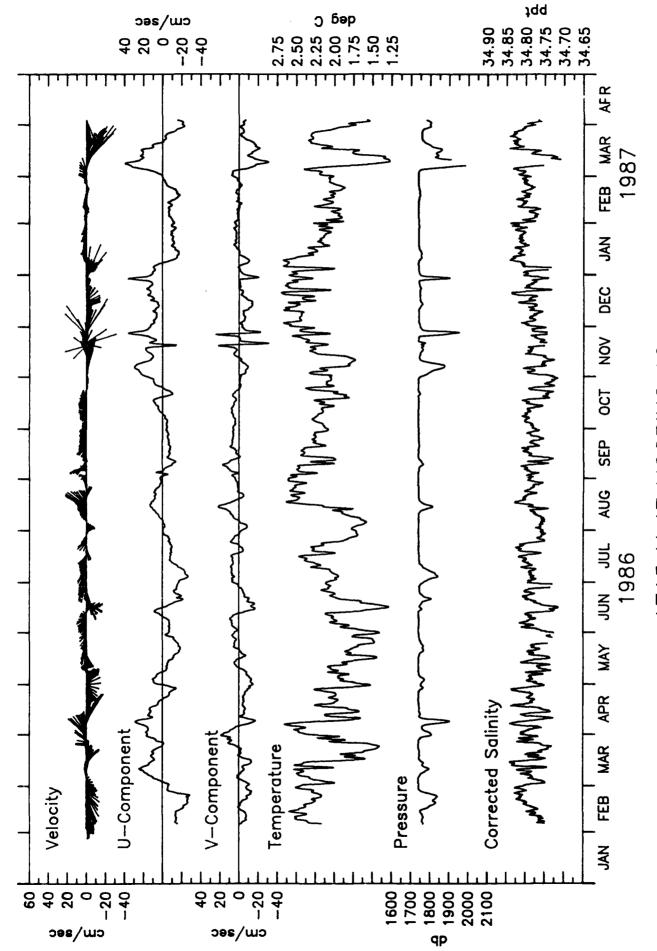




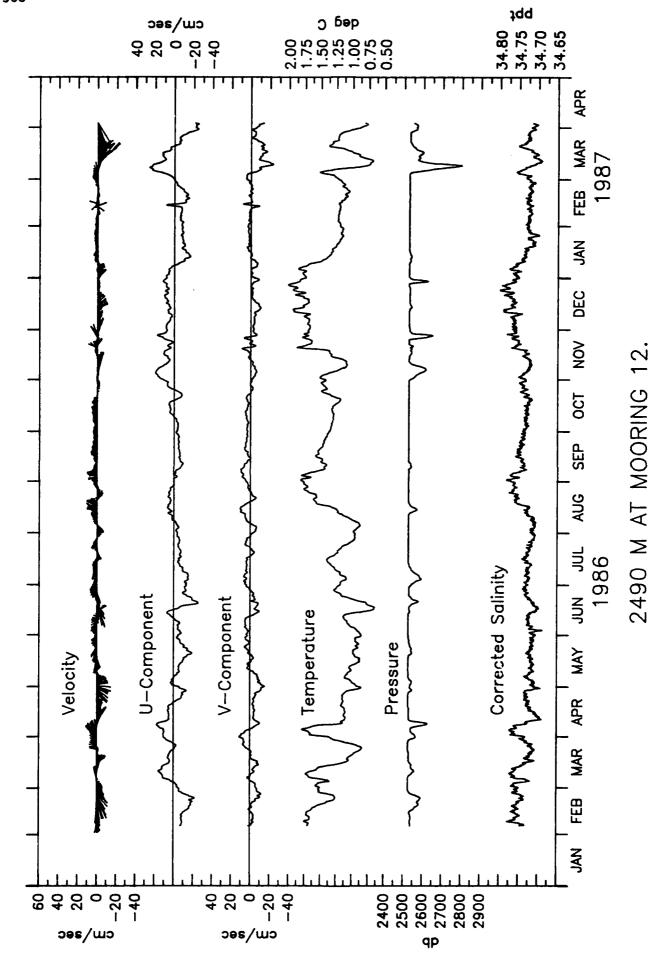
frequency, cycles per day

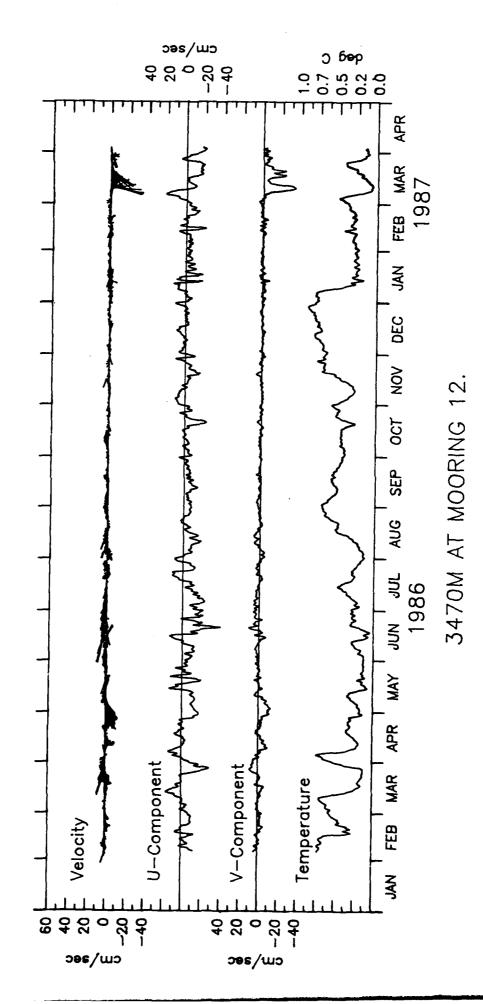


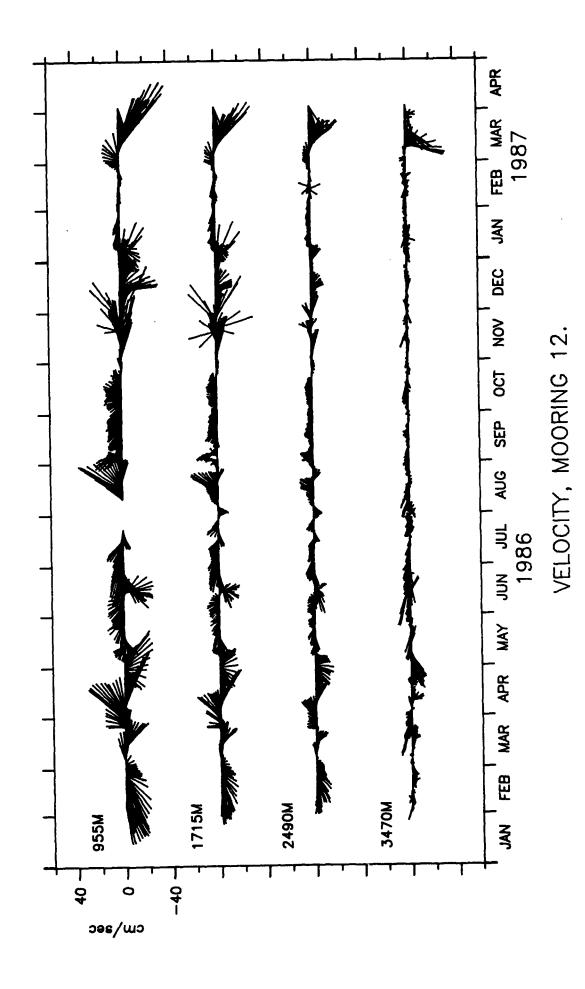


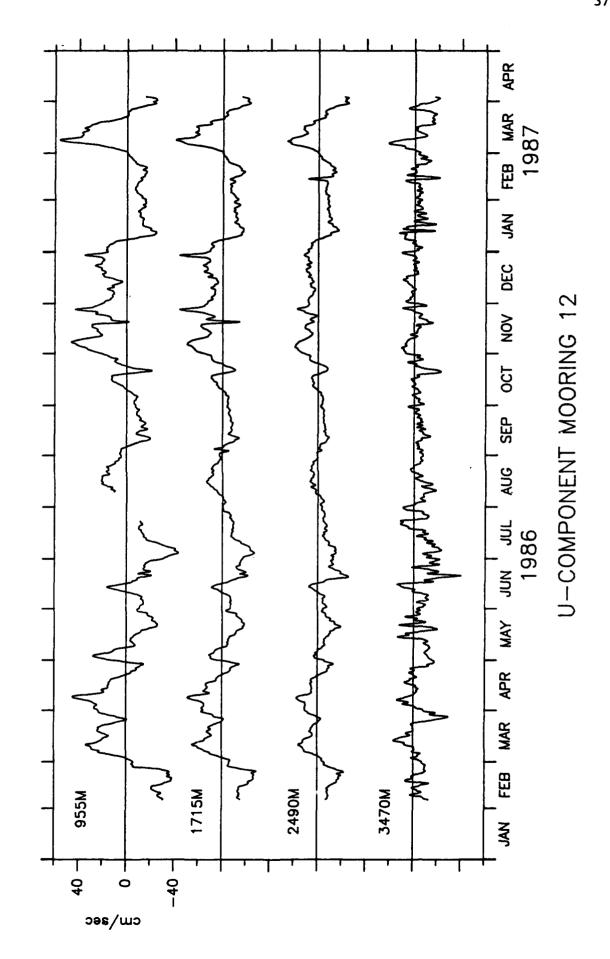


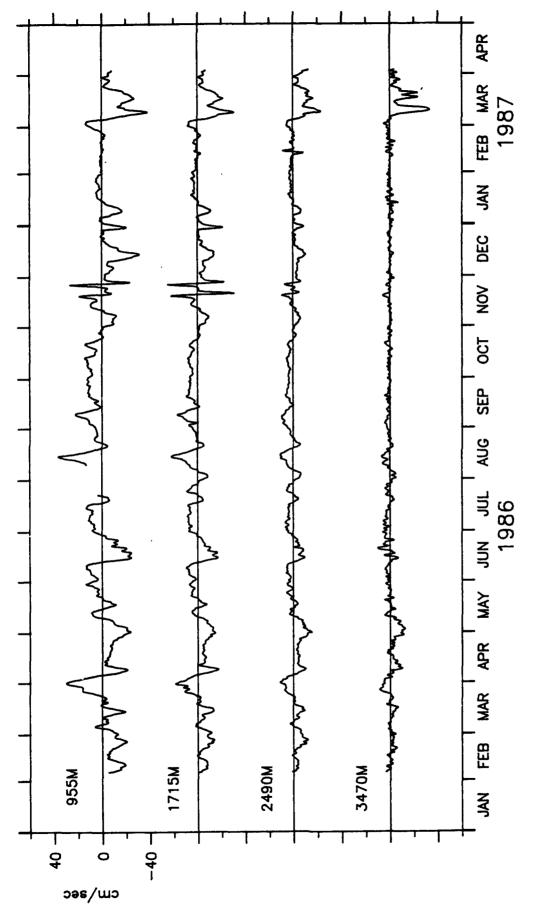
1715 M AT MOORING 12.



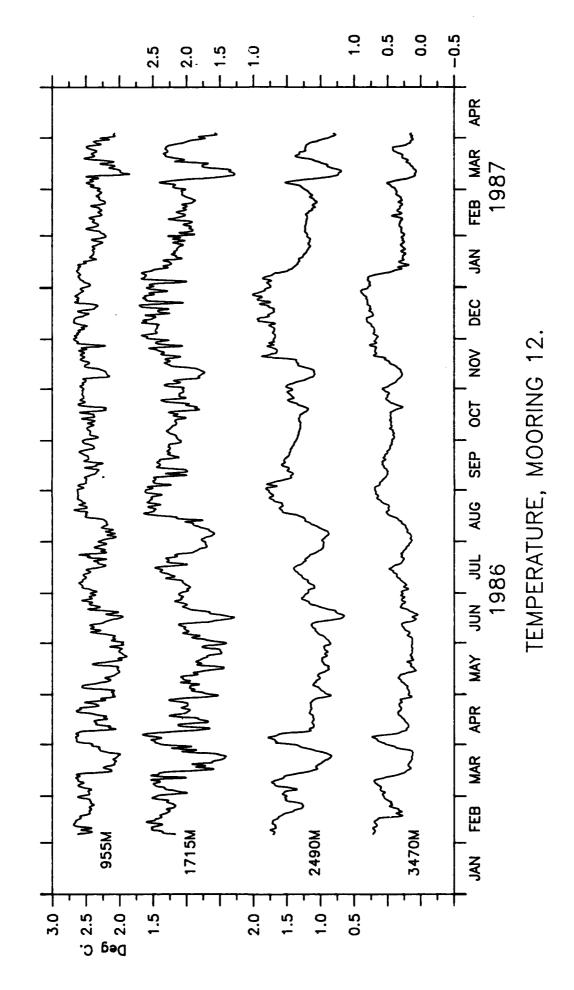


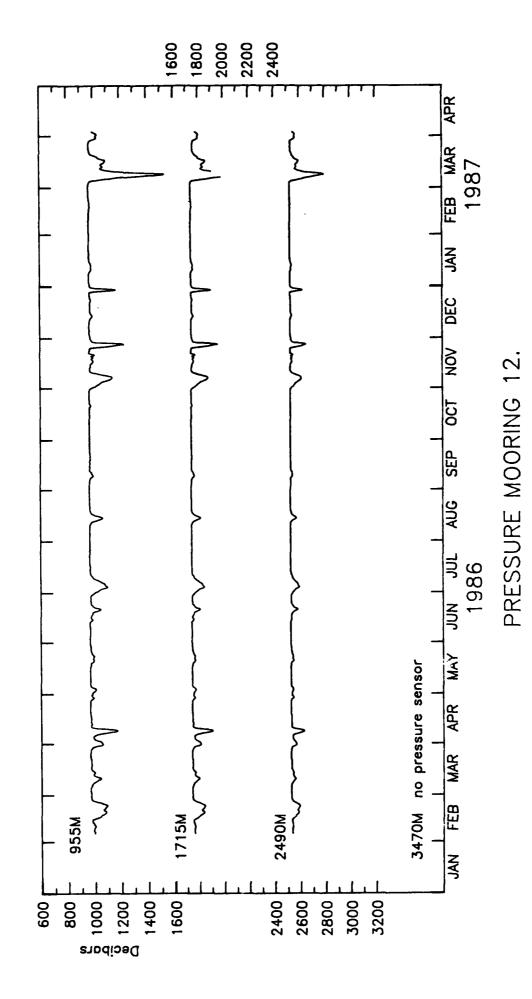


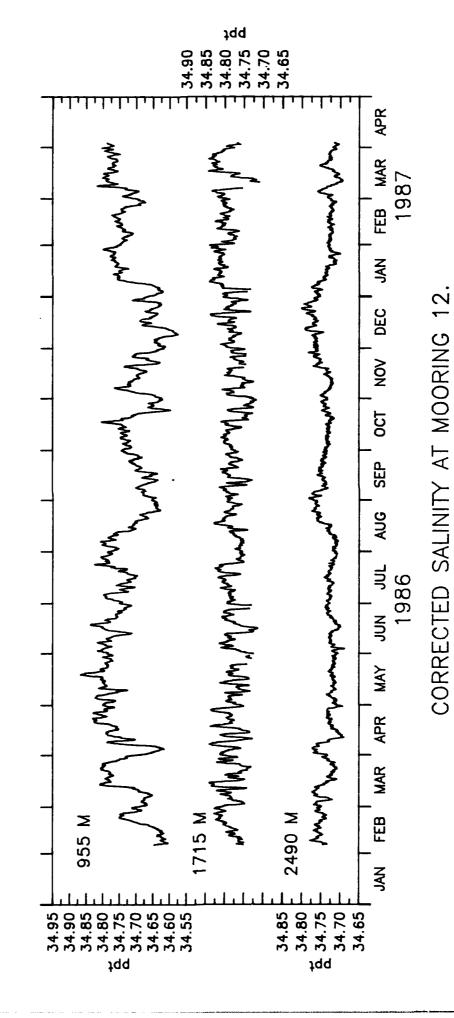




V-COMPONENT MOORING 12

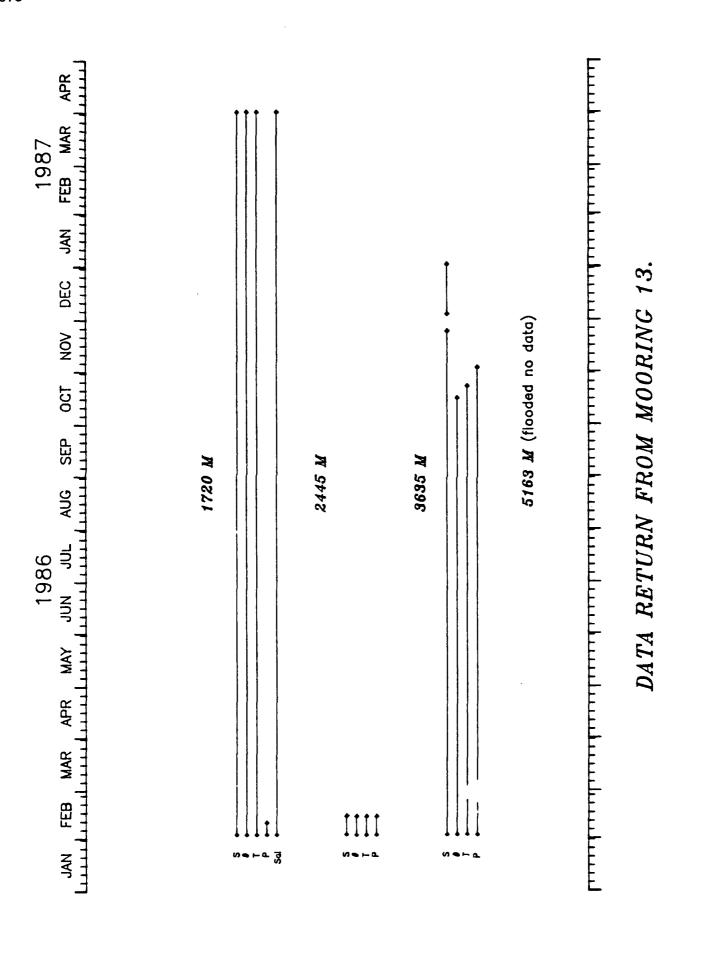






MOORING 13

48°43.07'S, 35°09.60'W



MOORING 13. UNFILTERED HOURLY DATA

1720M AT MOORING 13. 1600 5 FEB 86 - 0900 4 APR 87. TAPE 7215/12.

MIN MAX LENGTH ENDS AT	
83.00 48.90 10146 (0900 4 AP 44.10 30.20 10146 (0900 4 AP -0.12 3.07 10146 (0900 4 AP	R 87) R 87) R 87) R 87) B 86)
5 FEB 86 - 1200 18 FEB 86. TAPE 45	85/6.
2.30 44.00 309 (1200 18 FE	B 86)
44.00 -0.70 309 (1200 18 FE	•
11.90 10.80 309 (1200 18 FE	B 86)
· · · · · · · · · · · · · · · · · · ·	•
79.90 3459.00 309 (1200 18 FE	•
5 FEB 86 - 1300 7 JAN 87. TAPE 228	1/29.
0.80 58.90 7760 (1300 7 JA	N 87)
16.00 4810.00 6607 (2300 7 NO	•
11.90	B 86 B 86 B 86 1/29 N 87 87 86 T 86

5163M AT MOORING 13. TAPE 6735. FLOODED. NO DATA

(1720 M) PRESSURE SENSOR OVERRANGED AND DAMAGED.

(2445 M) METER FLOODED AFTER 18 FEB 86.

(3635 M) VERY POOR RECORD IN ALL CHANNELS, RECORDS TERMINATED EARLY.
GAP IN SPEED LINES: 6945 - 7245 (0100 22 NOV 86 - 1300
4 DEC 86).

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 13. LLP FILTERED 6-HOURLY DATA

1720M AT MOORING 13. 1800 6 FEB 86 - 1200 3 APR 87 TAPE 7215/12.

	MEAN	SD	MIN	MAX	LENGTH	ENDS A	ΔT
U V T P		9.18 0.36	-67.68 -40.70 0.30 1740.25	21.69 2.83	1682 1682	(0000 3	3 APR 87) 3 APR 87) 3 APR 87) 5 FEB 86)
24	45M AT MOC	RING 13.	1800 6 FE	B 86 - 0	600 17 FE	в 86. та	APE 4585/6.
U V T P S	~0.84 1.57	2.27 0.16	-29.01 -4.50 0.90 2479.45 34.73	3.31 1.67	43 43	(0600 17 (0600 17 (0600 17	FEB 86) FEB 86) FEB 86) FEB 86) FEB 86)
36	35M AT MOC	RING 13.	1800 6 FE	B 86 - 18	800 6 NOV	86 TAPE	2281/29.
V V	-5.92 -0.08	13.65 7.09			1023 1023		OCT 86)

1049

1093

0.80

4743.35

(1800 26 OCT 86)

(1800 6 NOV 86)

5163M AT MOORING 13. FLOODED, NO DATA. TAPE 6735.

3517.94

0.10

(1720 M) PRESSURE SENSOR OVERRANGED AND DAMAGED. SALINITY RECORD NOT CALCULATED.

(2445 M) METER FLOODED AFTER 18 FEB 86.

0.16

141.41

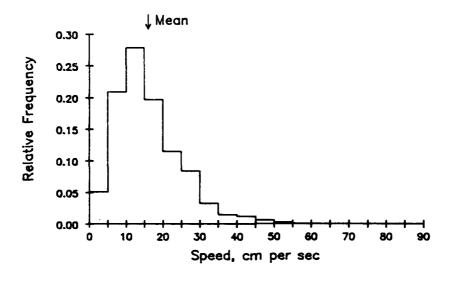
0.43

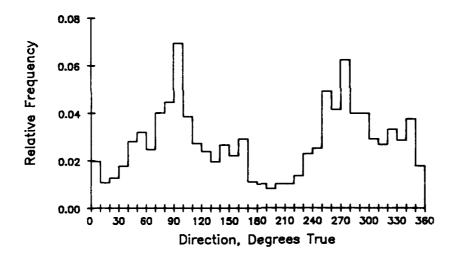
3746.77

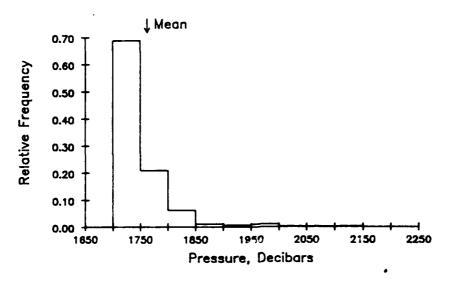
(3635 M) VERY POOR RECORD IN ALL CHANNELS, RECORDS TERMINATED EARLY.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

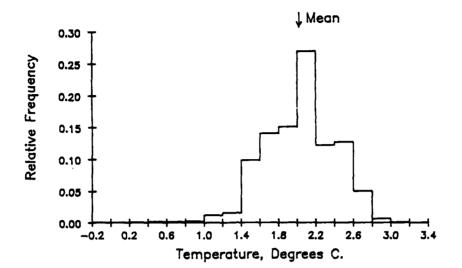
1720 METERS AT MOORING 13. TAPE 7215/12.



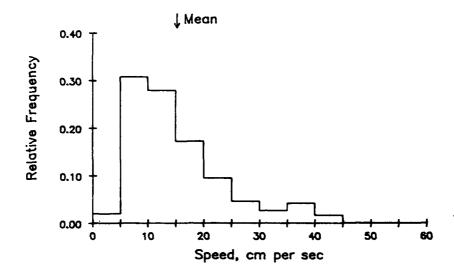


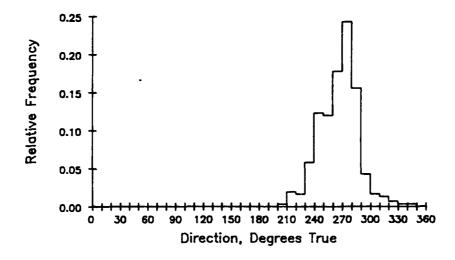


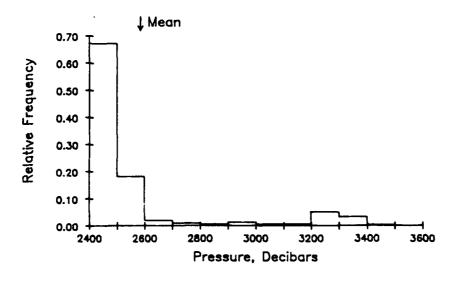
1720 METERS AT MOORING 13. TAPE 7215/12.



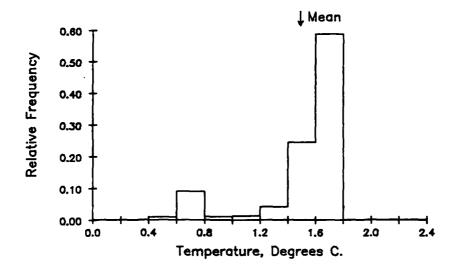
2445 METERS AT MOORING 13. TAPE 4585/6.



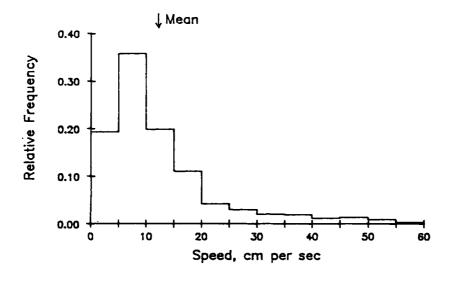


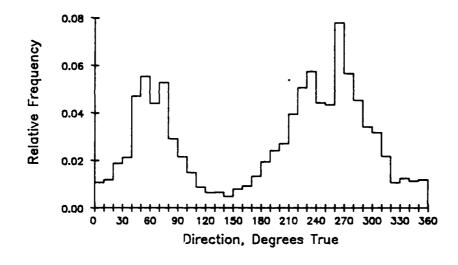


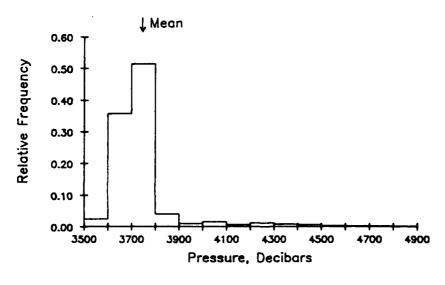
2445 METERS AT MOORING 13. TAPE 4585/6.



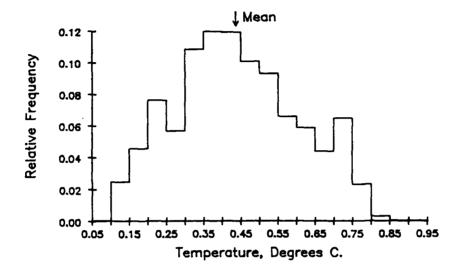
3635 METERS AT MOORING 13. TAPE 2281/29.



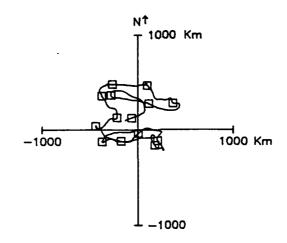


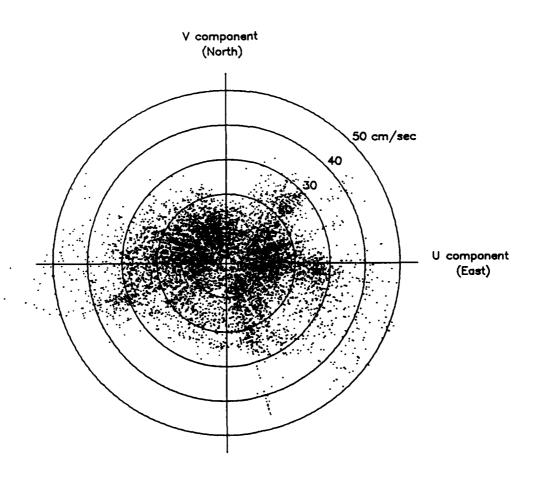


3635 METERS AT MOORING 13. TAPE 2281/29.

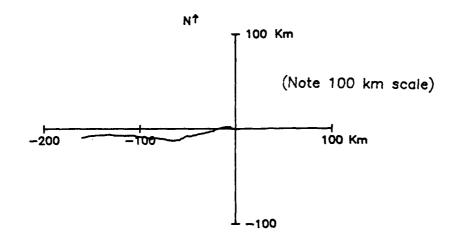


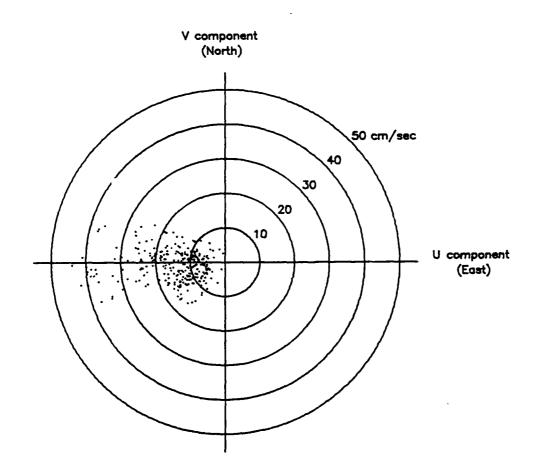
1720M AT MOORING 13. 5 FEB 86 - 4 APR 87. TAPE 7215/12.



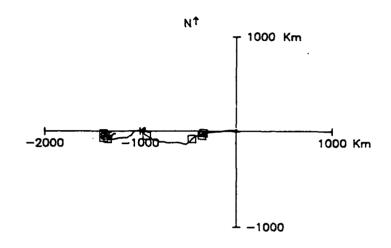


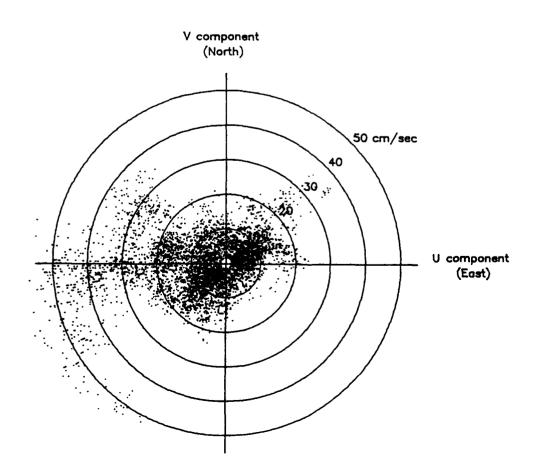
2445M AT MOORING 13. 5 FEB 86 - 18 FEB 86. TAPE 4585/6.





3635M AT MOORING 13. 5 FEB 86 - 21 OCT 86. TAPE 2281/29.





Unfiltered current, 1720 m at Mooring 13. Both components

100001

1000

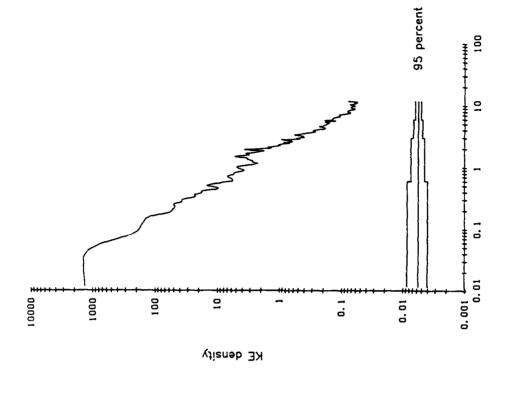
100

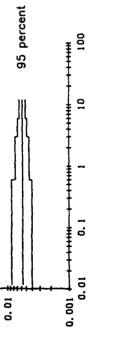
2

KE density

0.1

Unfiltered current. 3635 m at Mooring 13. Both components



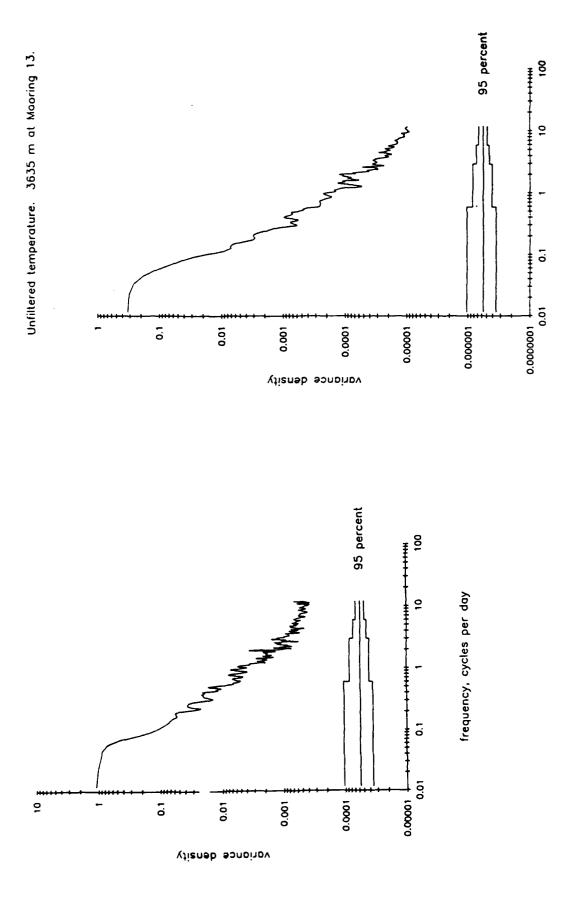


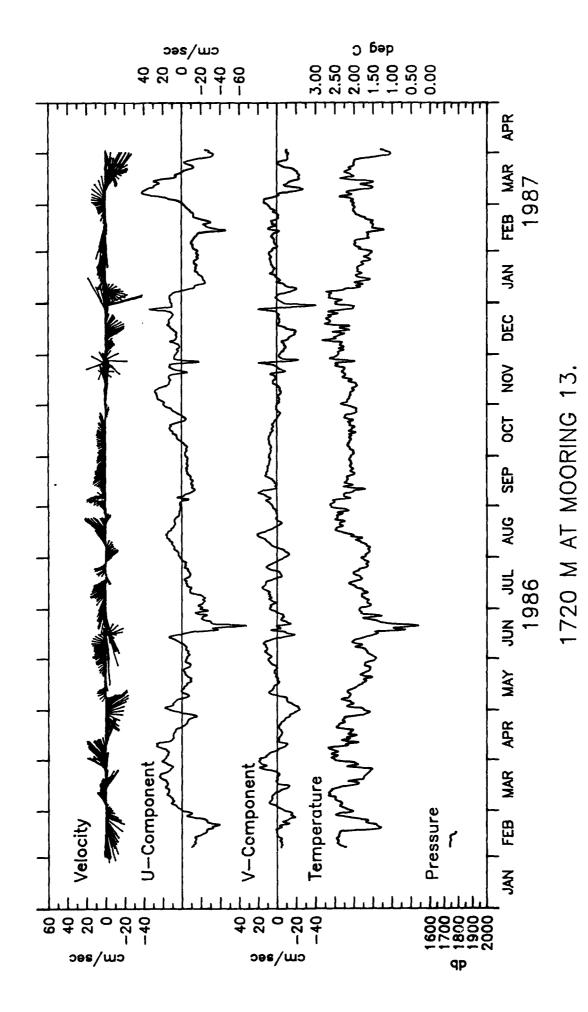
frequency, cycles per day

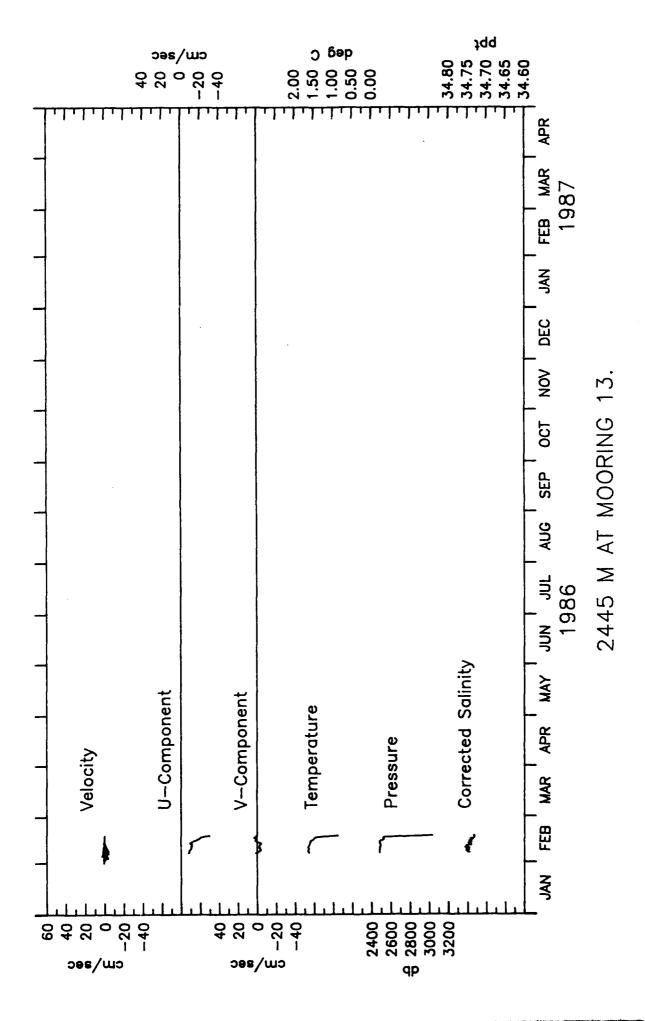
frequency, cycles per day

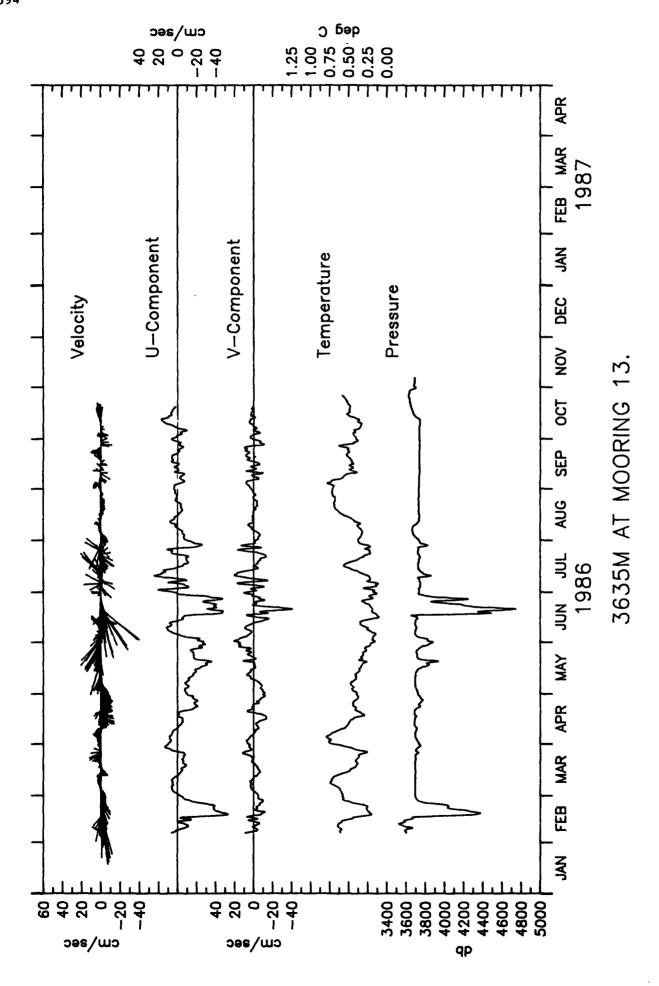
frequency, cycles per day

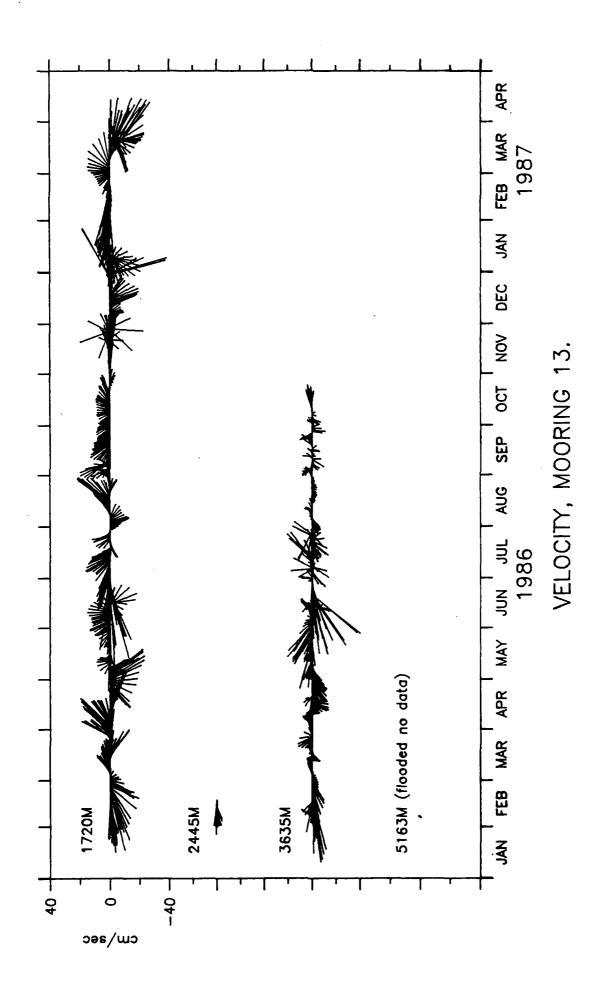
Unfiltered temperature. 1720 m at Mooring 13.

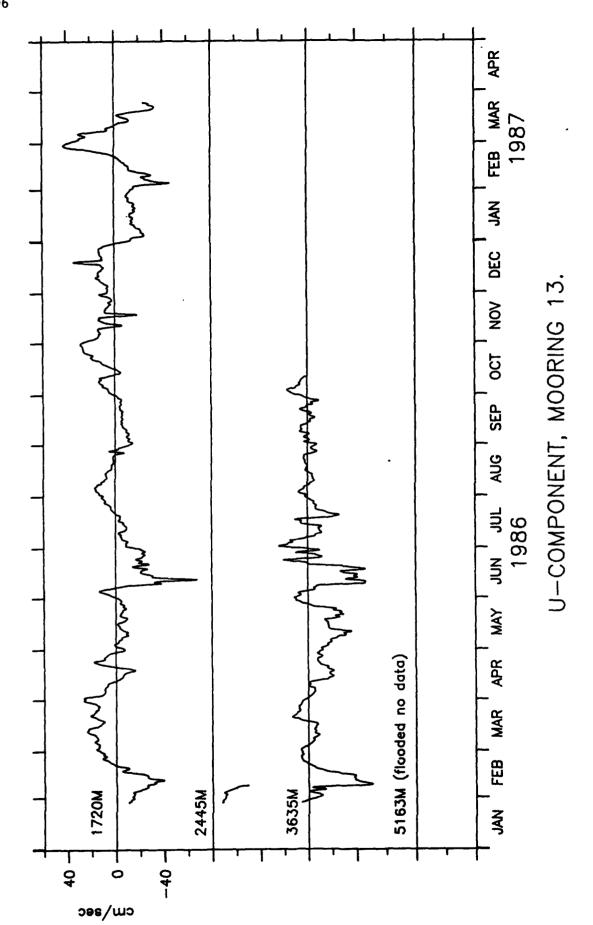


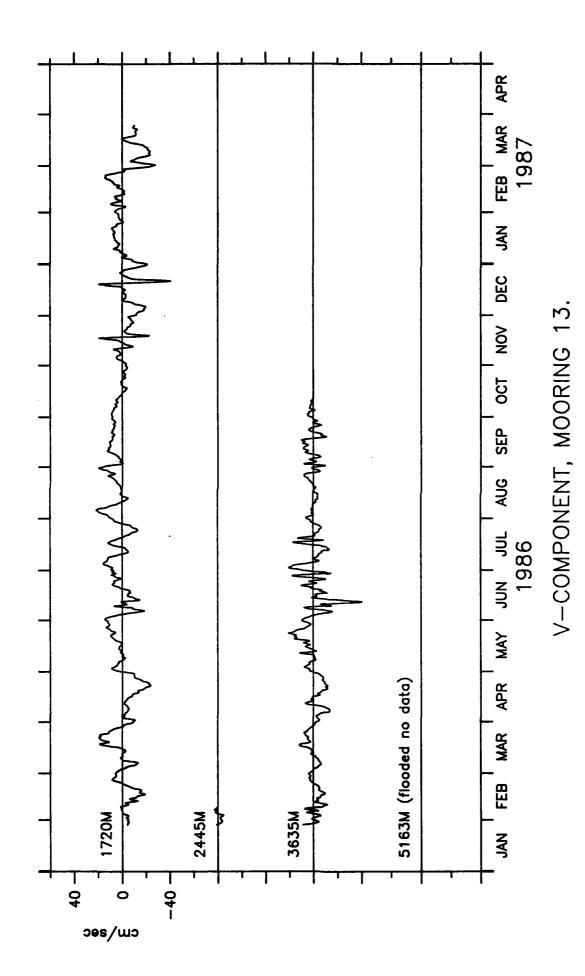


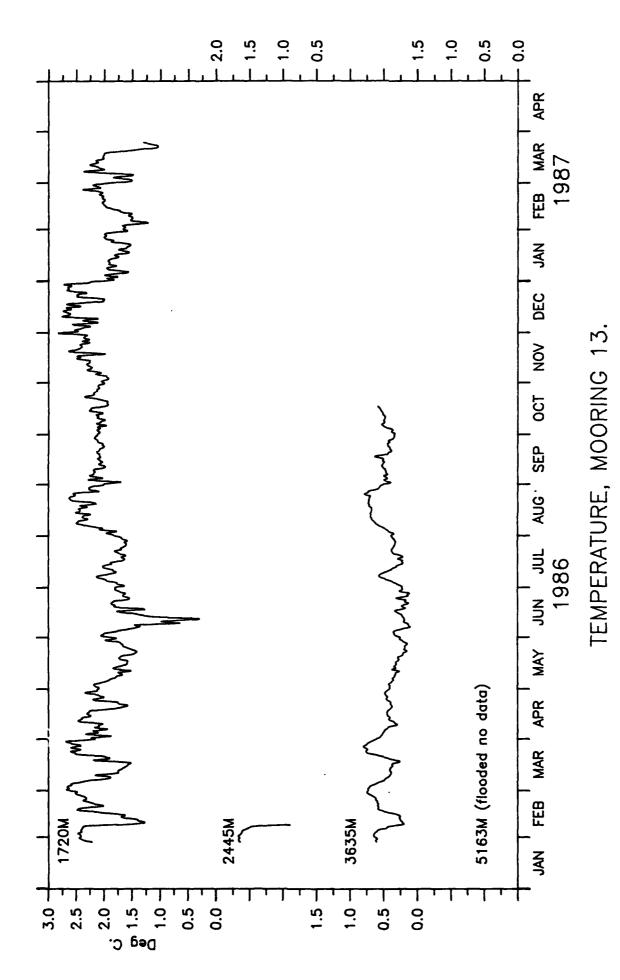


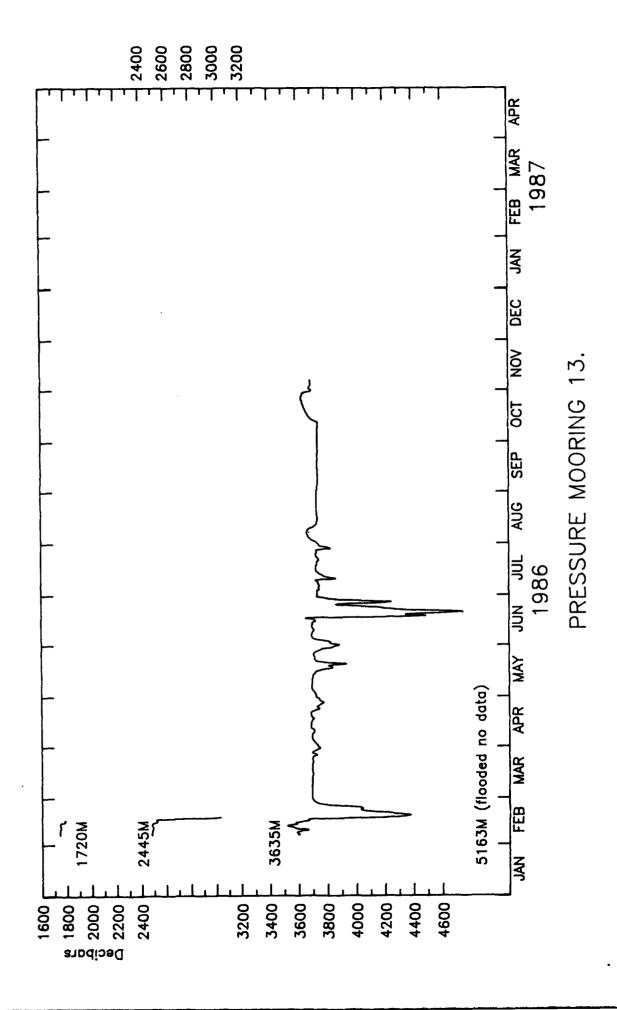












MOORING 14

48°21.70'S, 35°08.19'W

!	APR	
8/	MAR	
198		
	AN 1	
	DEC	
	NOV	
	OCT	
	SEP	
	AUG	
86	JU.	
19	NOT	
	MAY	
	APR	
	MAR	
	FBB	
	JAN	

2465 M

	3455 M	5185 M
na-23	N=-4	

المستطينيين المستريد المستريد

DATA RETURN FROM MOORING 14.

MOORING 14. UNFILTERED HOURLY DATA

2465M AT MOORING 14. 2000 5 FEB 86 - 1700 5 APR 87. TAPE 7216/11.

	MEAN	SD	MIN	MAX	LENGTH	ENDS AT	2
S U V T P	5.43 1.78	11.88 0.31	-37.70 -49.20	50.30 42.60 39.80 2.16 3557.00	10174	(1700 5 (1700 5 (1700 5	•
34	55M AT MOO	RING 14.	2100 5 FE	B 86 - 23	100 6 DEC	86. TAPE	500/67.
S U V T P	13.38 2.88 1.42 0.54 3592.57	11.44 10.15	-43.90	44.90 0.82	7297 6820 6820 7297 7297	(2100 6 (0000 17 (0000 17 (2100 6 (2100 6	NOV 86) DEC 86)
5185M AT MOORING 14. 2000 5 FEB 86 - 1700 5 APR 87. TAPE 7769/4.							
S U V T	13.53 3.14 -0.72 0.16	10.40	-33.10 -37.20		10174	(1700 5 (1700 5	APR 87) APR 87) APR 87) APR 87)

- (2465 M) SPEED BRIDGED LINES: 6773 - 6777 (0000 15 NOV 86 - 0400 15 NOV 86. PRESSURE OFFSCALE, GAP LINES: 3185 - 3195 (1200 18 JUN 86 - 2300 18 JUN 86)
- (3455 M) SPEED BRIDGED LINES: 2803 - 2812 (1500 2 JUN 86 - 0000 3 JUN 86) CLOCK DEAD AT RECOVERY, RECORDS TERMINATED EARLY.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB).

MOORING 14. LLP FILTERED 6-HOURLY DATA

2465M AT MOORING 14. 0000 7 FEB 86 - 1200 4 APR 87. TAPE 7216/11.

	MEAN	SD	MIN	MAX	LENGTH	ENDS AT
U V T P S	5.45 1.89 1.46 2590.26 34.75	10.63 11.46 0.30 98.00 2.35	-39.78	2.07 241.63	1687 1687 1687 1677	(1200 4 APR 87) (1200 4 APR 87) (1200 4 APR 87) (1200 4 APR 87) (1200 4 APR 87)
34	55M AT MOO	RING 14.	0000 7 FEE	3 86 - 18	00 5 DEC	86. TAPE 500/67.
U V T P	2.87 1.47 0.54 3592.84	9.89	-30.79 -33.58 0.18 3511.61	36.60 0.79	1128	(1800 15 NOV 86) (1800 15 NOV 86) (1800 5 DEC 86) (1800 5 DEC 86)
51	85M AT MOO	RING 14.	0000 7 FEE	3 86 - 12	00 4 APR	87. TAPE 7769/4.
U V T		10.88 10.09 0.03				(1200 4 APR 87) (1200 4 APR 87) (1200 4 APR 87)

- (2465 M) SPEED BRIDGED IN UNFILTERED RECORD.

 PRESSURE OFFSCALE GAP IN UNFILTERED RECORD, GAP

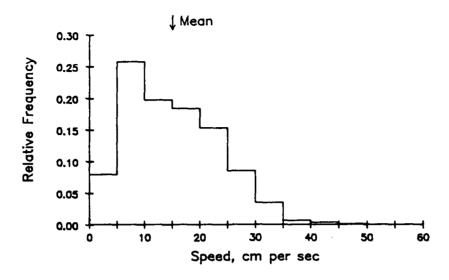
 LLP LINES: 523 532 (1200 17 JUN 86 1800 19 JUN 86)

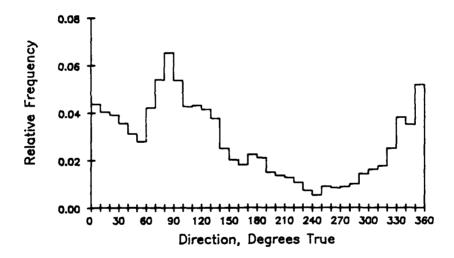
 GAPS IN SALINITY RECORD, BAD VALUES REMOVED
- (3455 M) SPEED BRIDGED IN UNFILTERED RECORD.

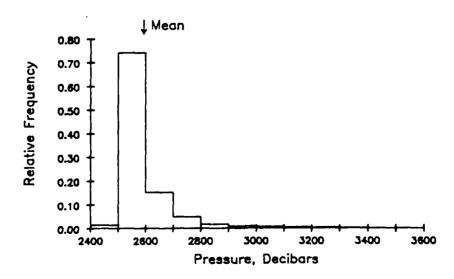
 CLOCK DEAD AT RECOVERY, RECORDS TERMINATED EARLY DUE TO POOR QUALITY.

(Speed, u, and v are given in cm/sec, Temperature in °C, Pressure in DB, and Corrected Salinity in ppt.)

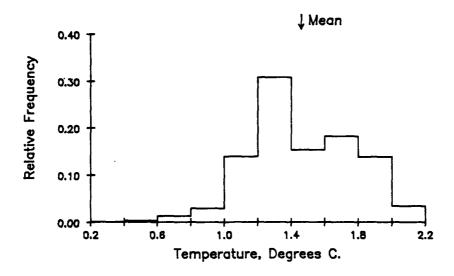
2465 METERS AT MOORING 14. TAPE 7216/11.

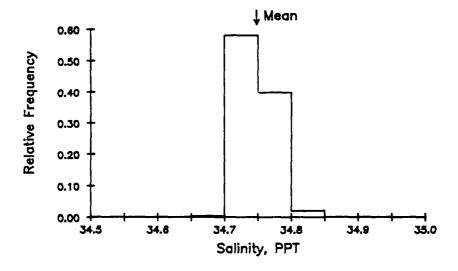




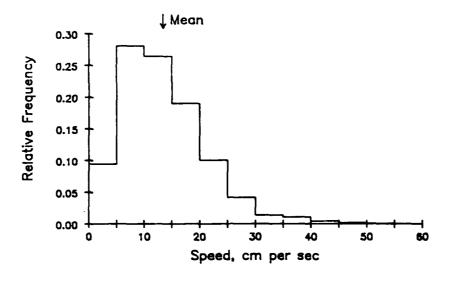


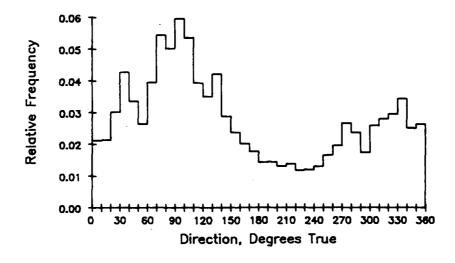
2465 METERS AT MOORING 14. TAPE 7216/11.

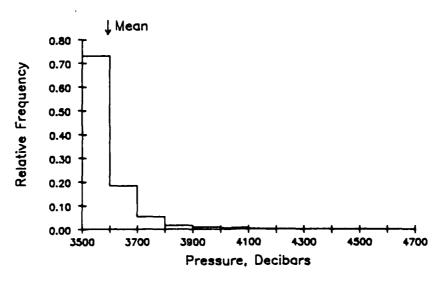




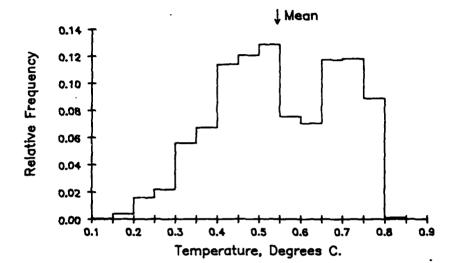
3455 METERS AT MOORING 14. TAPE 500/67.



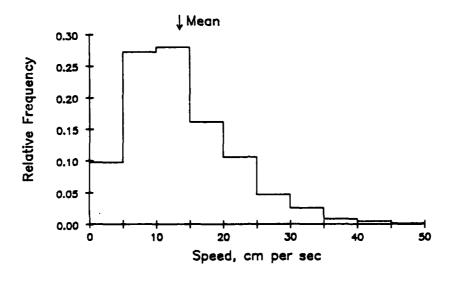


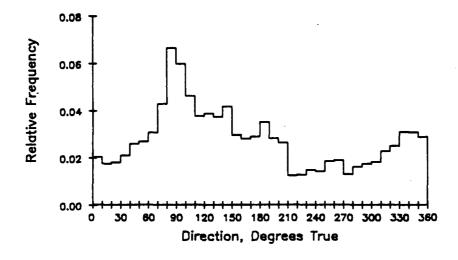


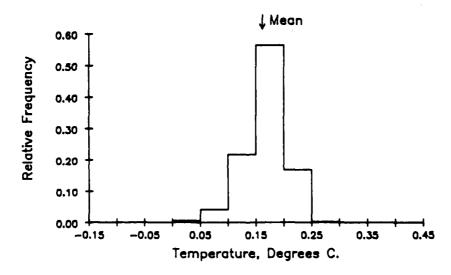
3455 METERS AT MOORING 14. TAPE 500/67.



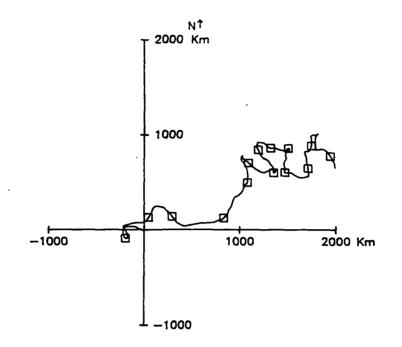
5185 METERS AT MOORING 14. TAPE 7769/4.

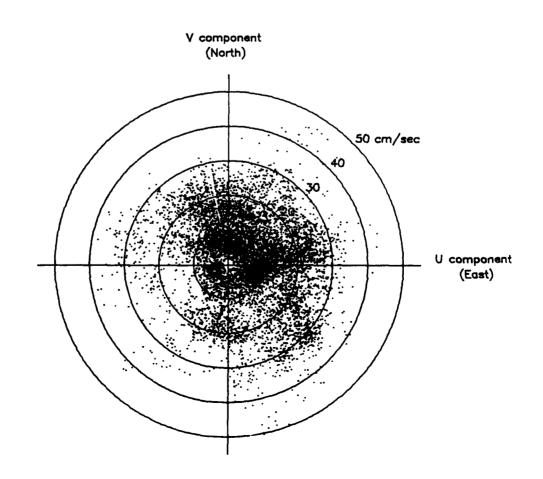




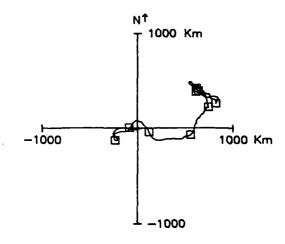


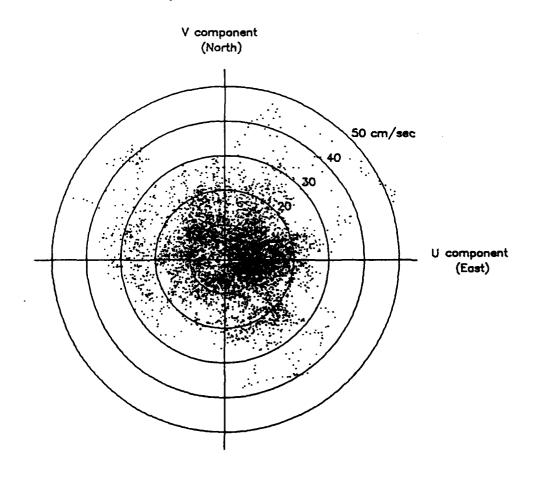
2465M AT MOORING 14. 5 FEB 86 - 5 APR 87. TAPE 7216/11.

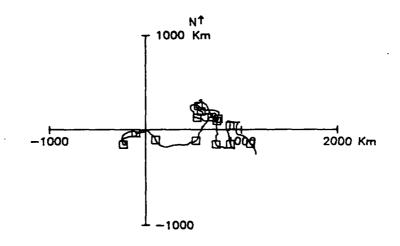


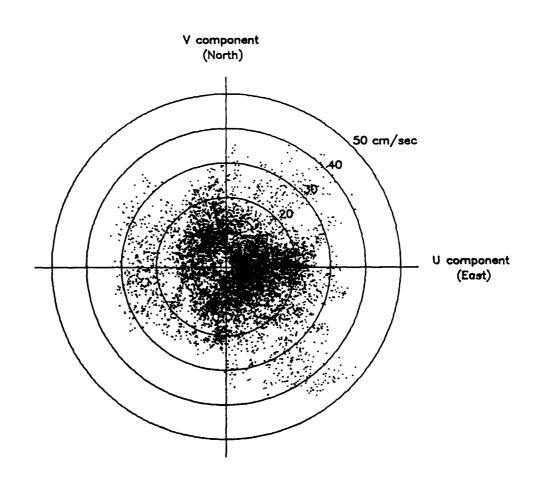


3455M AT MOORING 14. 5 FEB 86 - 17 NOV 86. TAPE 500/67.



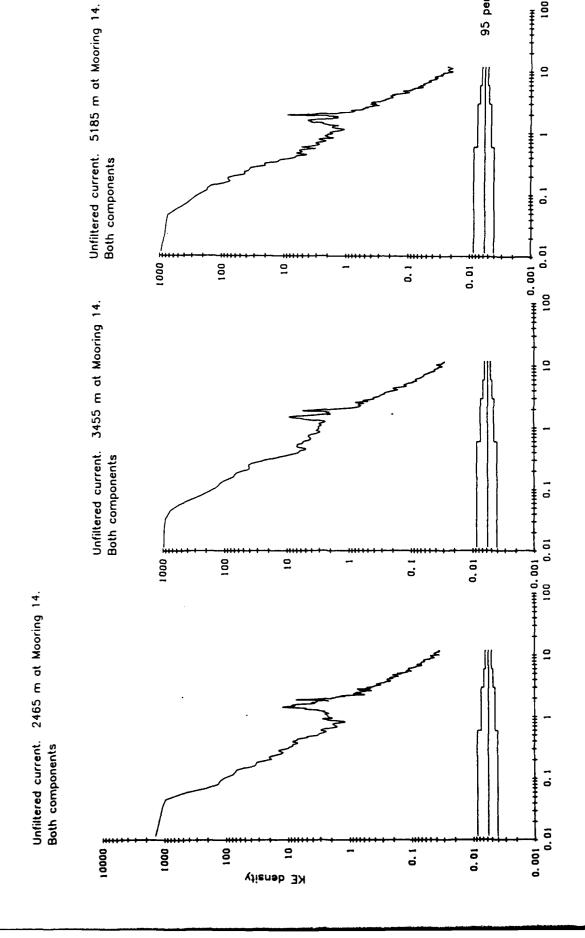






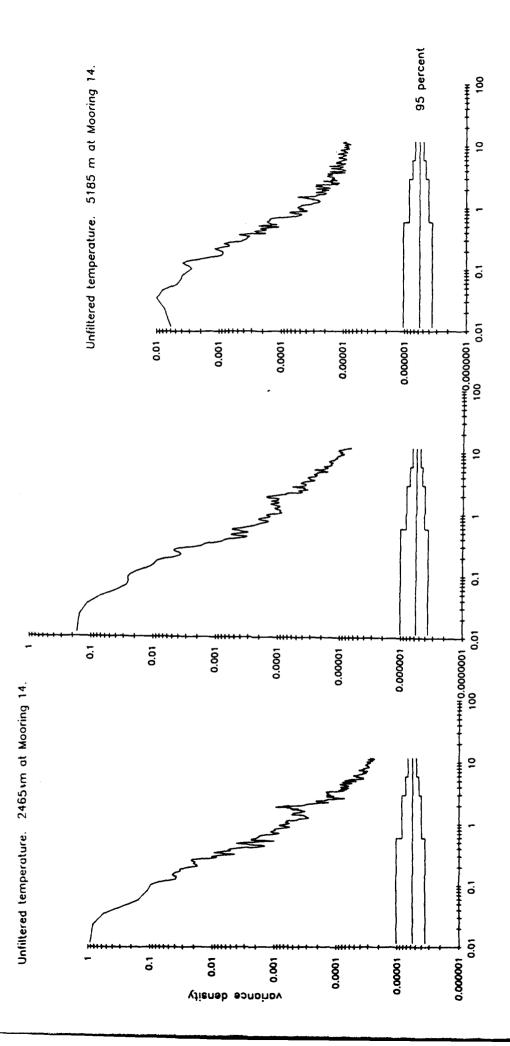
95 percent

001



frequency, cycles per day

Unfiltered temperature. 3455 m at Mooring 14.



frequency, cycles per day

